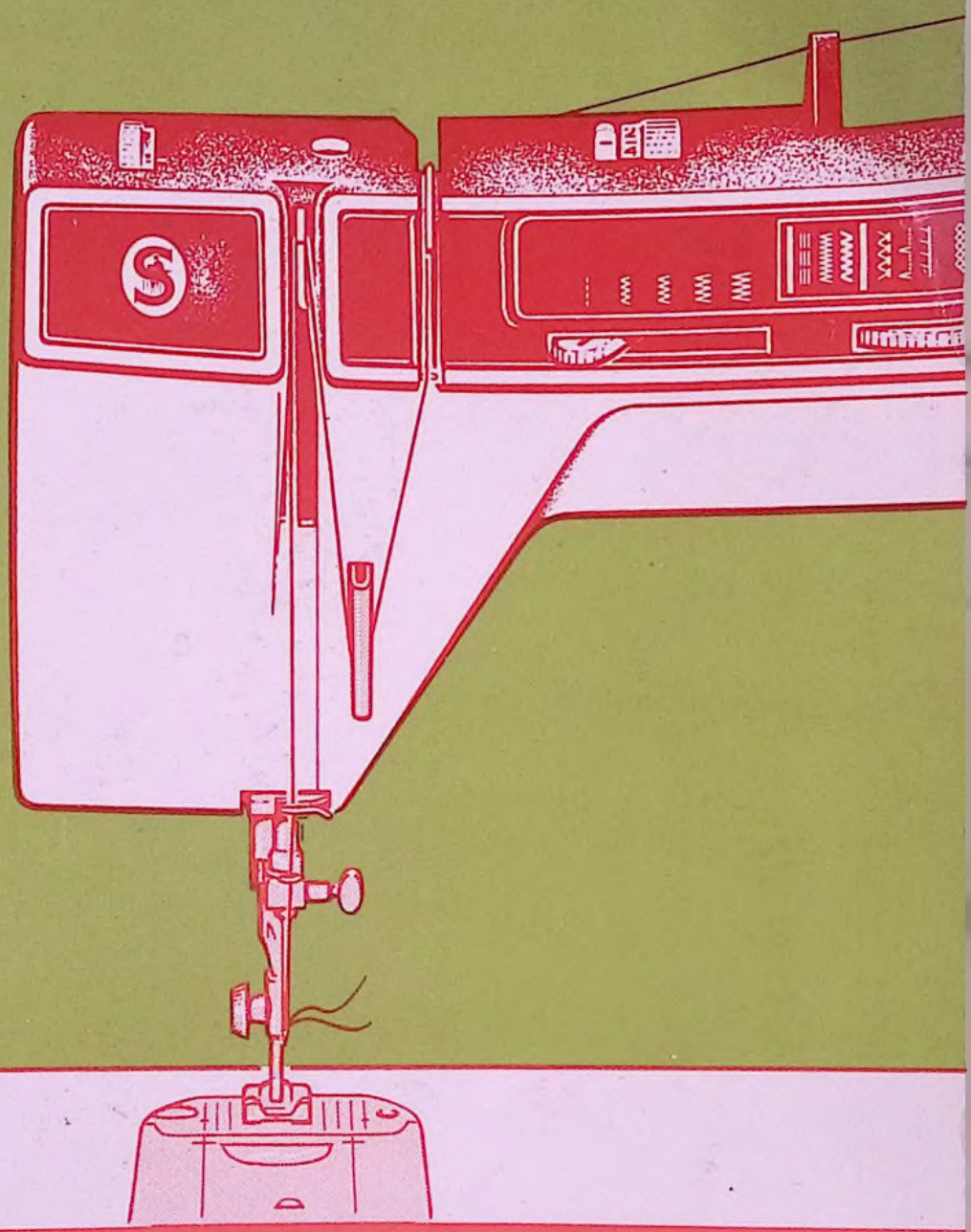


# SINGER

## 290

## CONTENTS


1. **Getting to Know Your Machine** ..... 2
   Principal Parts — What They Do ..... 3
   Accessories ..... 4

2. **Getting Ready to Sew** ..... 8
   Preliminary Steps ..... 8
   Choosing Needle and Thread ..... 9
   Threading the Machine ..... 10
   • Winding the Bobbin
   How to Start Sewing ..... 13
   Changing the Bobbin ..... 14
   Setting Selectors ..... 16

3. **Straight Stitching** ..... 21
   Sewing a Seam ..... 21
   Pin Basting • Starting a Seam • Ending a Seam • Guiding and Supporting Fabric

4. **Zig-Zag Stitching** ..... 24
   How Patterns are Produced ..... 24
   Selecting and Adjusting Zig-Zag Stitches ..... 25
   • Selecting a Pattern Group • Selecting a Stitch Pattern
   • Adjusting Width of Design • Adjusting Stitch Placement
   • Adjusting Stitch Length • Adjusting Needle-Thread Tension
   • Adjusting a Stitch Balance • Satin Stitching

5. **Twin-Needle Stitching** ..... 29
   Preparation ..... 29
   Threading the Twin-Needle ..... 29
   Machine Settings ..... 30
   Decorative Twin-Needle Stitching ..... 30

6. **Free-Motion Stitching** ..... 31
   Preparation ..... 31
   Script Lettering ..... 32
   Floral Designs ..... 33

7. **Chainstitching** ..... 34
   Preparation ..... 34
   Sewing a Chainstitch Seam ..... 36

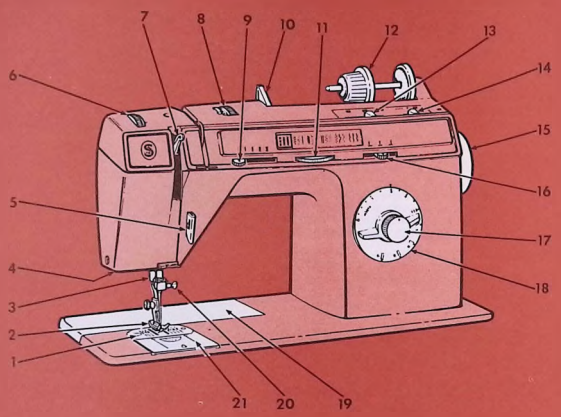
8. **Sewing the Professional Way** ..... 39
   Sewing Knit and Stretch Fabric ..... 39
   Stitch Pattern Chart • Guiding and Supporting Fabric • Plain Stretch Seams •
   Overedged Seams • Attaching Elastic • Finishes for Hems and Facings
   Handling Special Fabrics ..... 44
   Construction Details ..... 46
   Zippers • Corded Seams • Darts • Blindstitch Hems
   Buttons ..... 51
   Buttonholes ..... 52
   Decorative Touches ..... 59
   Monograms and Motifs • Topstitching • Appliqué
   Keeping up Appearances ..... 62
   Mending • Darning

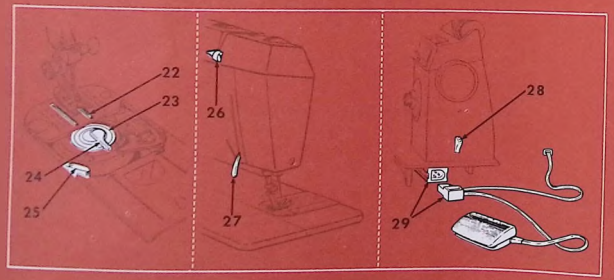
9. **Free-Arm Sewing** ..... 64

10. **Caring for Your Machine** ..... 66
   Cleaning and Lubricating ..... 66
   Changing the Light Bulb ..... 70
   Replacing the Slide Plate ..... 70
   Hints for Home Service ..... 71

**Index** ..... 72

# 1. Getting to Know Your Machine



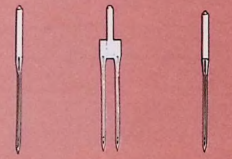





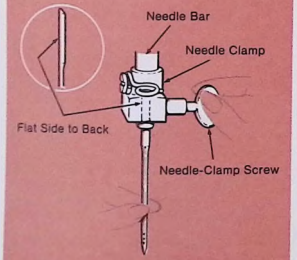

## *principal parts — what they do*

1. **Zig-Zag Needle Plate** provides working surface around the needle.
2. **Presser Foot** holds fabric against feed.
3. **Thread Cutter** is built into the presser bar for convenience and safety.
4. **Built-in Sewing Light** provides illumination around the needle area.
5. **Thread Guide** controls flow of needle thread.
6. **Numbered Pressure Dial** regulates presser foot pressure on fabric.
7. **Take-up Lever** controls flow of needle thread.
8. **Tension Dial** lets you select the right tension for your stitch, thread and fabric.
9. **Stitch Width Selector** controls width of zig-zag stitching and sets the machine for straight stitching.
10. **Self-Threading Eyelet** speeds threading of machine.
11. **Pattern Group Selector** is used to select any one group of three stitch patterns.
12. **Spool Holder** with horizontal pin holds spools of various sizes and lets thread unwind smoothly without spool turning.
13. **Stitch Pattern Selector** is color coded to select an individual stitch from a pattern group.
14. **Stitch Balance Control** lets you adjust the formation of *Flexi-Stitch** patterns.
15. **Hand Wheel** lets you manually position the needle into or above the fabric. *Always turn it toward you.*
16. **Needle Position Selector** places the needle in either ⊥ (left), ⊥ (center) or ⊥ (right) stitching position.
17. **Reverse-Stitch Push Button and Buttonhole Stitch Balancing Control,** has two separate functions. It allows you to stitch backwards and to balance stitching in four-step buttonholes. Pushing the button reverses stitching direction; rotating the button balances side stitching of buttonholes.
18. **Stitch Length Selector and Built-in-Four-Step Buttonhole Dial** has three separate functions. The numbered settings on the stitch length side of the dial allow for a variety of stitch lengths. The four settings for the buttonhole sequence are on the opposite side of the dial. A special green-and-yellow color code indicates stitch length setting for *Flexi-Stitch* patterns.
19. **Flip and Sew* Panel** converts machine for free-arm sewing.
20. **Needle Clamp** holds a single or a twin-needle. It is designed to eliminate the possibility of inserting needle backwards.
21. **Slide Plate** opens for access to bobbin. Window in plate allows you to see bobbin thread supply at a glance.
22. **Feed** moves fabric as it is being stitched.
23. **Transparent Bobbin** shows thread supply.
24. **Bobbin Latch** holds bobbin in place. Flips up for bobbin removal.
25. **Bobbin Push Button** activates bobbin winding without removing bobbin.
26. **Rear Thread Guide** controls thread before passing through tension discs.
27. **Presser Foot Lifter** raises and lowers the presser foot.
28. **Power and Light Switch** turns on power and sewing light simultaneously. **MAX.** and **MIN.** speed settings let you choose the best sewing speed for your work.
29. **Electrical Connections and Speed Controller** are designed for convenience and safety. To run the machine, press with foot on speed controller. The harder you press, the faster the machine will sew within the speed range you select.

Transparent Bobbin




Needles




Changing the Needle

# *accessories*

The accessories that come with your sewing machine will help you to sew with ease and comfort.

## BOBBINS

- One transparent bobbin in your machine.
- Additional transparent bobbins with your accessories.

## NEEDLES

**IMPORTANT:** Your sewing machine has been designed to obtain best results with SINGER* needles. You should follow the recommendations in this instruction book and on the needle package for correct style and size of needle for different types and weights of fabric.

- Catalog 2020 needles, for all-purpose sewing.
- Catalog 2025† needle for twin-needle work.
- Catalog 2045 needles, for sewing synthetic knit and stretch fabrics.

## CHANGING THE NEEDLE

1. Raise the needle to its highest position by turning the hand wheel *toward you.*
2. Loosen the needle-clamp screw and remove needle.
3. Insert new needle in clamp, *with the flat side of the needle to the back;* push it up as far as it will go.
4. Tighten the needle-clamp screw.

†**CAUTION:** *Use this needle with the zig-zag plate and zig-zag foot or special-purpose foot only. Do not use any other accessories with this needle as needle breakage will occur.*



## PRESSER FEET

- The zig-zag foot on your machine.

Additional interchangeable snap-on presser feet:

- Straight stitch foot for close fabric control.
- Buttonhole foot to make square-end buttonholes.
- Zipper foot for inserting zippers and stitching corded seams.
- Special purpose foot for all kinds of decorative zig-zag stitching.

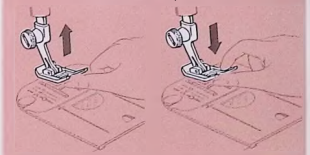
One-piece presser foot for button sewing.

## CHANGING PRESSER FEET

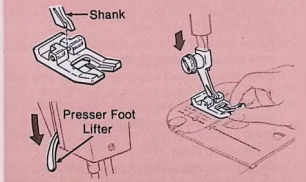
Most presser feet furnished with your machine snap on and off a common shank.

- Raise needle and take-up lever to highest position by turning hand wheel toward you.
- Raise presser foot.

To remove the complete presser foot (with shank), of snap-on presser feet and one-piece presser foot for button sewing, loosen the presser foot screw and remove shank and foot together.

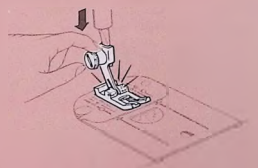



1. Press toe of presser foot upward as far as it will go. Then snap down to remove.

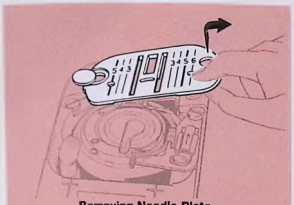



2. Centre the new presser foot under the shank.

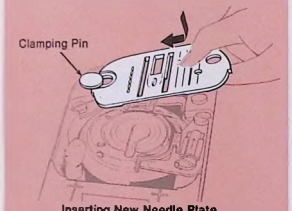
   Lower the presser foot lifter so that the shank fits over the presser foot pin.



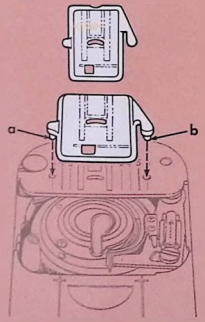
3. Press presser foot screw down firmly until foot snaps into place.



Removing Needle Plate




Inserting New Needle Plate




## NEEDLE PLATES

The **zig-zag needle plate** on your machine can be used with all presser feet.

The **straight stitch needle plate** is for use with the straight stitch presser foot.

The **chainstitch needle plate** is used for single-thread chainstitching.

The **snap-in feed cover** is used for button sewing, free-motion work and darning.

### Removing and Replacing Needle Plate

- Raise presser foot.
- Turn hand wheel toward you until the needle is in its highest position.
- Open the slide plate. Lift needle plate up and to the right until it snaps free.
- Insert new needle plate by placing it under the clamping pin, push it gently to the left and press down until it snaps into place.
- Close slide plate.

## ATTACHING SNAP-IN FEED COVER

- Raise needle to highest position by turning hand wheel *toward you.*
- Raise presser foot, open slide plate and insert zig-zag needle plate.
- Slide snap-in feed cover away from you over needle plate until points a and b are positioned directly over holes in needle plate as illustrated. Snap in point a. Then push b in toward point a until it snaps into place. Close slide plate.
- To remove, open slide plate then simply lift up front edge of feed cover, as illustrated and remove. Close slide plate.



## SPOOL PIN FOR TWIN-NEEDLE STITCHING

This spool pin permits you to stitch two parallel rows of stitching simultaneously (see page 29 for detailed instructions).

## THREAD LEAD-OFF

This lead-off holds narrow-diameter spools of thread on the spool pin. (See page 10.)

## LINT BRUSH

The lint brush is used for cleaning your sewing machine.

## CONTAINER OF OIL

One container of SINGER® oil

Your machine will serve you perfectly for many years if you will take a few moments to keep it in good operating condition. See page 66.

## BLINDSTITCH HEM GUIDE

The blindstitch hem guide, used with the zig-zag foot, positions the hem fold in front of the needle for blindstitch hemming. To attach guide, loosen presser foot shank. Make sure underside of guide clears the slide plate and front of foot.

Tighten presser-foot screw.

## CHAINSTITCH THREAD GUIDE
## CHAINSTITCH NEEDLE PLATE
## CHAINSTITCH INSERT

Used for single-thread chainstitching. (See page 34.)

# 2. Getting Ready to Sew

## *preliminary steps*

### CONNECTING MACHINE

Before plugging in your machine, be sure that the voltage and frequency indicated on the right end of the machine are within the range marked on the electric meter installed by your power company.

Insert the machine plug into the machine socket at the right end of the machine, and connect the power-line plug to your electrical outlet.

### OPERATING MACHINE

To turn on the machine and sewing light, and set speed range, set the power and light switch in the selected range.

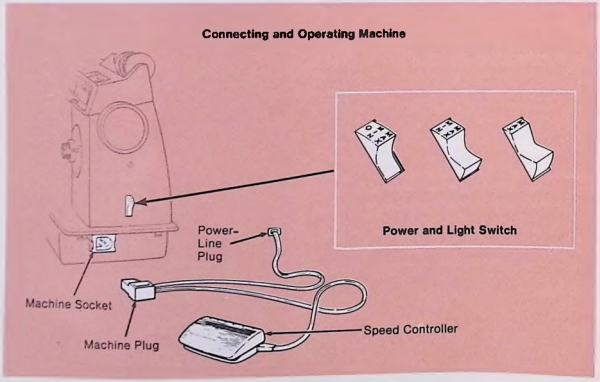
- The **MIN** setting (switch pressed in halfway) allows for maximum control. Use this setting for special jobs such as button sewing and buttonhole making, and where intricate details require close control.
- The **MAX** setting (switch pressed in all the way) allows for full speed capacity of the machine. It is best for long, straight seams, easy-to-handle fabrics, and general sewing where a variety of speeds are needed.

***CAUTION:*** *Disconnect the power-line plug from the socket outlet when changing needle, feet or needle plates or when leaving the machine unattended. This eliminates the possibility of starting the machine by accidentally pressing the speed controller.*

**To run the machine,** press the speed controller with your foot. The harder you press, the faster the machine will sew within the selected speed range. To stop machine, remove foot from controller.

***CAUTION:*** *Because of the up and down movement of the needle, you must work carefully and watch the sewing area when operating the machine.*

**Connecting and Operating Machine**





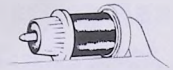

## *choosing needle and thread*

The needle and thread you choose will depend upon the fabric being stitched. The table below is a practical guide to needle and thread selection. Refer to it before starting a sewing project. Be sure to use the same size and type of thread in both needle and bobbin.

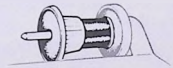
**FABRIC, THREAD AND NEEDLE TABLE †**

| FABRIC WEIGHT AND TYPE | THREAD | NEEDLES | |
|---|---|---|---|
| | | TYPE | SIZE |
| DELICATE — tulle, chiffon, fine lace, organza, chiffon velvet | Fine polyester, nylon, or cotton thread | Style 2020 (15x1) | 9†† |
| LIGHTWEIGHT — batiste, organdy, voile, taffeta, crepe, chiffon velvet, plastic film, satin, surah, peau de soie, shantung, brocade | Cotton-wrapped polyester (FINE) 100% polyester 50 mercerized cotton | Style 2020 (15x1) | 11 |
| MEDIUM WEIGHT — gingham, seersucker, madras, percale, pique, linen chintz, faille, fine corduroy, velveteen, suitings, vinyl, terry cloth, challis, twill | Cotton-wrapped polyester 100% polyester 50 mercerized cotton 60 cotton | Style 2020 (15x1) | 14 |
| MEDIUM HEAVY — gabardine, tweed, sailcloth, duck, denim, coatings, drapery fabrics, vinyl, deep-pile fabrics, corduroy, bonded fabric | Cotton-wrapped polyester 100% polyester Heavy-duty mercerized cotton 40 to 60 cotton | Style 2020 (15x1) | 16 |
| HEAVY — overcoatings, upholstery fabrics, canvas | Cotton-wrapped polyester Heavy-duty mercerized cotton 40 cotton | Style 2020 (15x1) | 18 |
| KNITS, WOVEN STRETCH AND ELASTIC — double knits, bonded knits, spandex, nylon tricot, ciré tricot, jersey, panné velvet, stretch terry | Cotton-wrapped polyester 100% polyester 50 mercerized cotton | Style 2045 Ball Point (Yellow Band) | 14 |
| LEATHER — suede, kidskin, calf, capeskin, buckskin, cabretta, patent, cobra, lined leathers, simulated leathers | Cotton-wrapped polyester 100% polyester 50 mercerized cotton | Style 2032 (15x2) | 11<br>14<br>16 |
| VINYLS (KNIT BACK) — suede, imitation reptile, crinkle patent, patent, embossed and printed vinyls | Cotton-wrapped polyester 100% polyester 50 mercerized cotton | Style 2045 Ball Point (Yellow Band) | 14 |
| WOVEN FABRICS (ALL WEIGHTS) — decorative straight-stitch topstitching | Buttonhole twist ††† | Style 2020 (15x1) | 16<br>18 |
| LIGHT AND MEDIUM WEIGHTS (WOVEN ONLY) decorative twin-needle stitching | Cotton-wrapped polyester 100% polyester 50 mercerized cotton | Style 2025 (twin) | 14 |

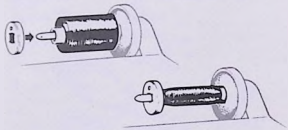
†Does not apply to chainstitching.
††Size 9 needle recommended for sewing only. For bobbin winding, use larger size needle.
†††Use with mercerized cotton, or polyester thread in bobbin.



For Large Spools



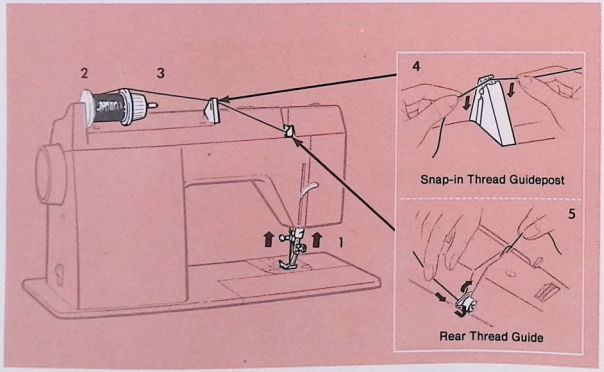
For Medium Spools



For Small Spools

## THREADING THE MACHINE

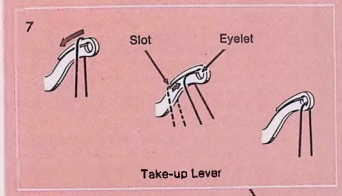
1. *Raise presser foot and be sure needle is in its highest position.*
2. Place spool of thread on horizontal spool pin. If spool being used has a retaining slit, this should be placed against the spool cushion to the right.
3. Press appropriate thread lead-off holder firmly against spool.
   - For large spools of thread, use the large holder with the wide end against the spool.
   - For medium size spools, use the large holder with the narrow end against the spool.
   - For small diameter spools with either large or small quantities of thread, use the small lead-off which comes in your accessory box.
4. Lead thread from spool holder and snap it down into guidepost eyelet.
5. Hold thread down under finger, as illustrated, and lead thread under rear thread guide, and across slot in top of machine.

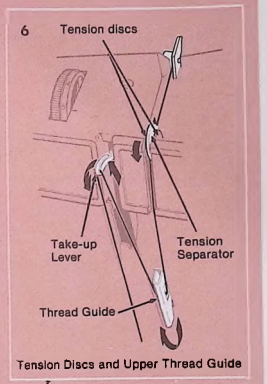


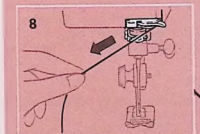


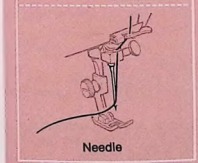


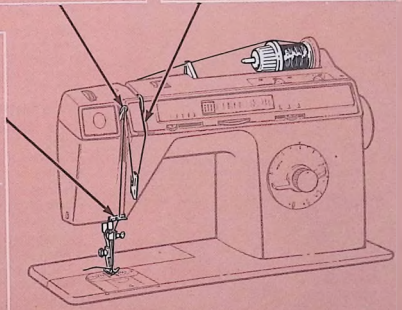

6. Draw thread firmly between left tension disc and tension separator, then down around thread guide on front of machine. (Presser foot must be raised to allow thread to enter discs.)
7. Thread take-up lever by guiding thread through slot and into eyelet.
8. Lead thread from take-up lever down to lower thread guides, as shown, and thread needle from front to back. Draw about 10cm (4") of thread through eye of needle.

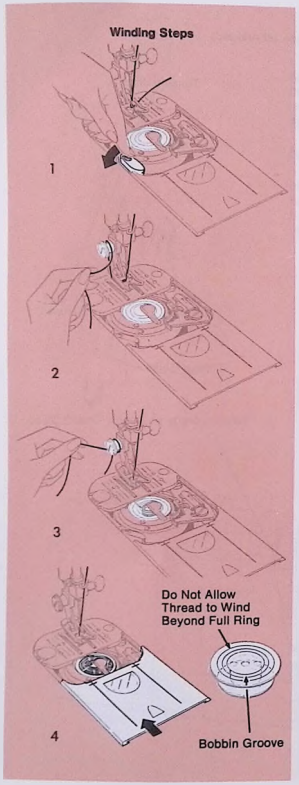


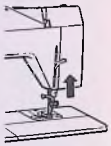



## WINDING THE BOBBIN

The push-button bobbin will make your sewing go faster than ever before — whether you are using a lot of one kind of thread or small quantities of different threads, as you are likely to do when mending or darning.

You will find a bobbin in place under the slide plate of your machine. If the bobbin runs out of thread while you are sewing, you can rewind it without removing it from the machine.

### Preparation Steps



1. It is best to use the zig-zag, special purpose, or straight stitch presser foot.
2. *Raise presser foot to release tension on thread,* and raise the needle to its highest position. (Make sure your needle is larger than a size 9. See footnote on page 9.)
3. To open slide plate, pull it gently toward you. *Make sure bobbin is empty.* This will allow thread to enter bobbin groove for start of wind. For removal of bobbin and thread, see page 14.
4. Set needle position selector at center (↓) (see page 17), and set stitch width selector at straight stitch setting (see page 16). Set stitch pattern selector at white bar (see page 20).

### Winding Steps

1. Press bobbin push button to the left to engage it in winding position.
2. Wrap thread around presser foot screw, and hold end of thread firmly.
3. Start the machine. Use the **MIN** setting for maximum control.
   - Pull thread end away after a few coils have been wound.
   - Keep your eye on the bobbin as it fills. *Do not allow thread to wind beyond the outside* FULL *ring.*
4. Close slide plate to release push button to sewing position. Turn to the next page for instructions on starting to sew.

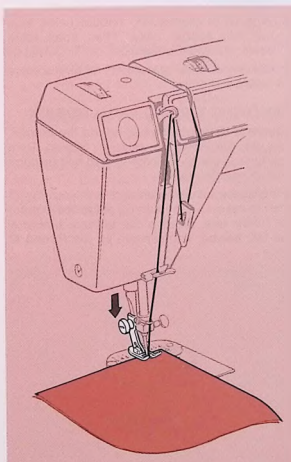


# *how to start sewing*

How you begin to sew after winding a bobbin depends on whether your stitching is to start *at* or *away* from the edge of the fabric.

## TO START AT FABRIC EDGE

- Position needle in very edge of fabric by pressing speed controller lightly or turning the hand wheel.
- Lower the presser foot and stitch. The continuous thread, leading from the needle to the bobbin, will "lock" over the fabric edge.

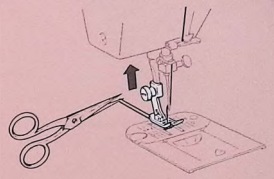


Starting at Fabric Edge with a Continuous Thread

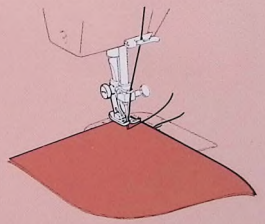
## TO START AWAY FROM FABRIC EDGE

- Pull thread back under presser foot and cut.
- Position needle in fabric where desired and stitch.

**Note:** Should the bobbin run out of thread after you have begun a line of stitching, remove the fabric, rewind the bobbin, and follow the two immediately preceding steps.

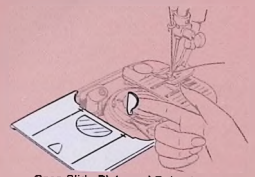


Cutting Continuous Thread



Starting Away from Fabric Edge

Removing Bobbin



Open Slide Plate and Raise Latch

Lift Out Bobbin

Replacing Empty Bobbin

Slip Bobbin into Case

Snap Latch Down

# *changing the bobbin*

## REMOVING THE BOBBIN

*Raise needle to its highest position.*

1. Open slide plate; leave bobbin push button in sewing position.
2. Raise bobbin latch by inserting finger under end of latch at center of bobbin.
3. Insert finger under rim of bobbin immediately to right of latch and remove the bobbin.

## REPLACING AN EMPTY BOBBIN

1. Make sure bobbin halves are securely tightened.
2. With latch raised, slip bobbin (wide side up) into bobbin case. Then snap latch down to secure bobbin.
3. Leave the slide plate open until you have finished winding.

## REMOVING THREAD FROM BOBBIN

If there is not much thread left on the bobbin, you do not need to remove bobbin from machine — simply pull the thread end through hole in needle plate.

If there is a lot of thread left and you do not wish to reserve it by setting aside the bobbin for future use, remove the bobbin, unscrew the two halves, and remove all the thread at once.

**Note:** *Remember to securely tighten two bobbin halves.*

Removing Thread from Bobbin

## REPLACING A WOUND BOBBIN

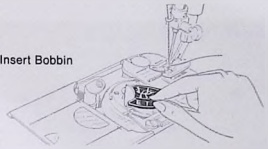
*Raise needle to its highest position.*

1. Open slide plate; leave bobbin push button in sewing position.
2. Draw approximately 10cm (4") of thread from bobbin and place bobbin in case with thread leading off the right side of latch. Snap latch down to secure bobbin.
3. Close slide plate, allowing the thread to enter the slot in the slide plate. Then raise the bobbin thread.

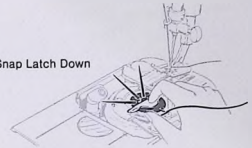
## RAISING THE BOBBIN THREAD

1. Hold needle thread lightly with left hand and turn hand wheel slowly toward you so that needle enters needle plate.
2. Continue turning hand wheel until needle rises and brings up bobbin thread in a loop.
3. Undo the loop and place both threads under the presser foot, drawing them to the back of the machine. Position needle in fabric where desired, lower the presser foot and stitch.

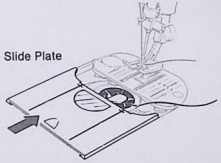
Insert Bobbin



Snap Latch Down

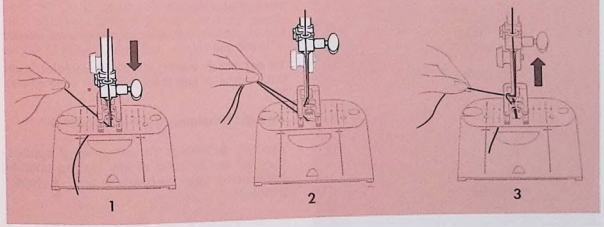


Close Slide Plate

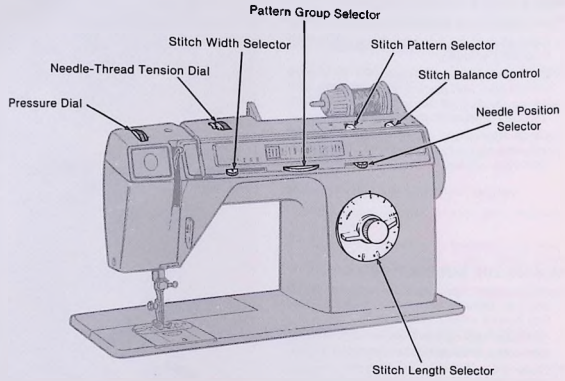


Replacing a Wound Bobbin

Raising the Bobbin Thread



## *setting selectors*



Stitch Width Selector Settings

### SETTING STITCH WIDTH

The stitch width selector does two jobs: it sets the machine for straight stitching, and it controls the width of zig-zag stitching. Four stitch width settings are indicated plus a setting for straight stitching.

*Before moving the selector, make sure needle is above the fabric.*

**To set stitch width,** slide the selector lever until indicator line is aligned with desired setting.

**Straight Stitching:** Set the selector at ⋮ .

**Zig-Zag Stitching:** To suit sewing application, set the selector at any zig-zag position between ⋮ (narrow-position) and ⋮ (wide-position).



### SETTING NEEDLE POSITION

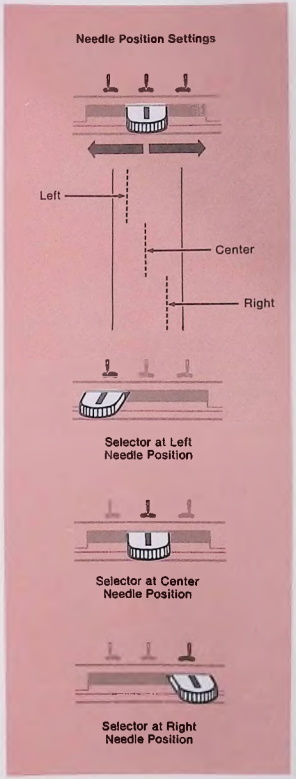
The needle position selector places the needle in left ( ), center ( ), or right ( ) stitching position. You will need to set it before you start running the machine.

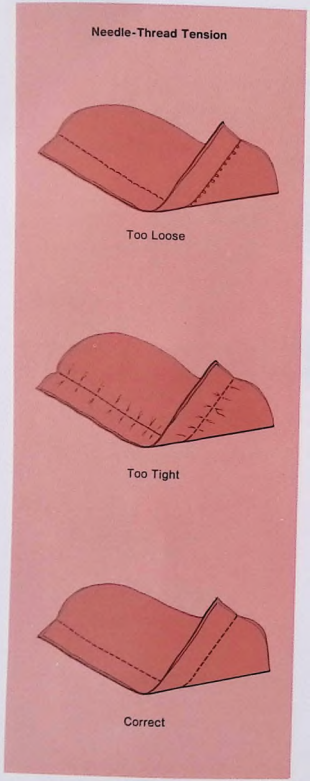
*Before moving the selector, always make sure the needle is out of the fabric.*

To position the needle, slide the lever to left or right until indicator line is under desired setting.

**Straight Stitching:** Normally you will use the center ( ) needle position. But if you wish to place the stitching at left or right of center, slide the lever to desired position. The zig-zag needle plate and zig-zag foot must be used if left or right needle positions are selected.

**Zig-Zag Stitching:** You will use center ( ) position most often. Left ( ) and right ( ) positions are for special stitch placement. For example: A setting is used for button sewing. Settings and are used to place narrow zig-zag stitching to the left and right of center in decorative work.



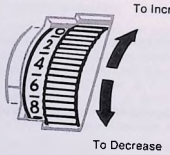



## REGULATING NEEDLE-THREAD TENSION

The needle-thread tension dial regulates the amount of tension on the needle thread and lets you select just the right setting for your fabric and thread. The numbers on the dial eliminate guesswork in duplicating settings.

Correct tension is important because too much or too little will weaken your seams or mar the appearance of decorative work. To determine the correct tension, make a test on a sample of your fabric. If the stitches look loose, increase tension. If the fabric puckers, decrease tension. (For instructions on adjusting zig-zag stitch tension, see page 27.)

- **To increase tension,** turn to higher number.
- **To decrease tension,** turn to lower number.




**Tension Dial**

## SETTING STITCH LENGTH

The stitch length selector dial controls the length of both straight and zig-zag stitching. The numerals from **1** to **4** represent the length of each stitch in millimeters: the higher the number, the longer the stitch. Generally, shorter stitches are best for lightweight fabric, longer ones for heavier fabric. The micro area between **0** and **1** represents stitches less than 1mm long, and is used for closed zig-zag or satin stitching.

- **To shorten stitch length,** turn dial clockwise to a lower number.
- **To lengthen stitch length,** turn dial counterclockwise to a higher number.

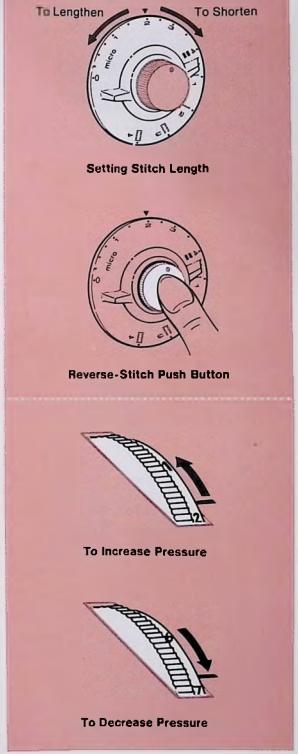
**For reverse stitching,** depress push button located in center of dial, hold in until reverse stitching is completed, then release push button. Push button can be depressed while machine is sewing.

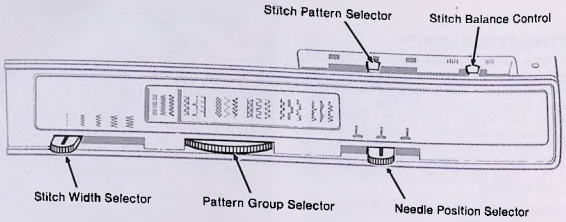
**Note:** Reverse stitching cannot be done when using a *Flexi-Stitch** pattern.

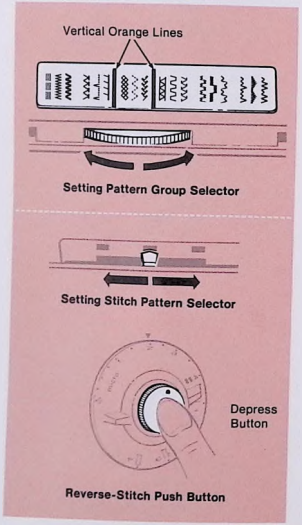
## REGULATING PRESSER-FOOT PRESSURE

The pressure dial regulates the pressure that the presser foot exerts on the fabric. Correct pressure is important to make the fabric feed smoothly and evenly without being marred.

- **To increase pressure,** turn dial to a higher number.
- **To decrease pressure,** turn dial to a lower number.
- **For darning,** turn dial to **0**.






### SETTING PATTERN GROUP SELECTOR

The pattern group selector gives you a choice of six groups each containing three patterns. Select a pattern group before you set the stitch pattern selector.

**To select a pattern group,** rotate selector until the vertical orange lines frame the group you have selected. Then set stitch pattern selector for the selected pattern color following the directions below.

### SETTING STITCH PATTERN SELECTOR

The stitch pattern selector lets you choose one of the three stitches from the pattern group you have chosen.

**To select any pattern,** depress and hold reverse-stitch push button while sliding pattern selector until it is aligned with corresponding color bar.



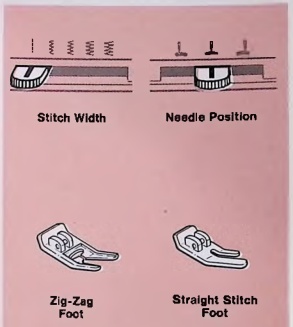
# 3. Straight Stitching

## *setting selectors*

*Before making any setting adjustments, raise the needle out of the fabric.*

- Pattern Group: Any Blue Pattern
- Stitch Width:
- Needle Position:
- Stitch Length: To suit fabric
- Zig-Zag or Straight Stitch Foot

When your fabric or sewing procedure requires close control, you may wish to use the straight stitch presser foot and the straight stitch needle plate that come with your accessories.



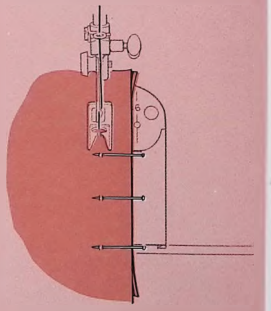

## *sewing a seam*

### PIN BASTING

Pin basting is a time saver and can be used in place of hand basting when you are sewing seams in easy-to-handle fabrics. When sewing with pins it is important to use fine pins and to place them correctly in relation to the stitching line.

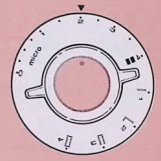
Place pins so that:

- They are at right angles to the stitching line.
- They just nip into the fabric at the stitching line.
- They do not extend under both sides of the presser foot. *Never place pins on the underside of the fabric in contact with the feed.*
- Sew, pulling pins out of fabric as you stitch. *We do not recommend sewing over pins.*

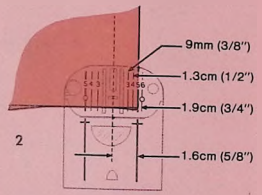


## STARTING A SEAM

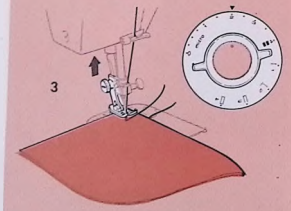
1. Set stitch length selector for desired length of stitch.
2. Align edge of fabric along one of the numbered guidelines on the needle plate.
3. Position needle in fabric about 1.3cm (1/2") from the edge.
4. Lower the presser foot. Depress and hold reverse-stitch push button, and run the machine at a slow speed.
   - While holding reverse-stitch push button, back-stitch to edge of fabric for reinforcement. (Do not sew beyond edge of fabric).
5. Release push button and stitch forward to end of fabric, using the selected guideline to keep seam straight.




1




2



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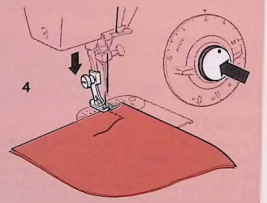
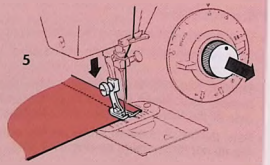


4



5



## ENDING A SEAM

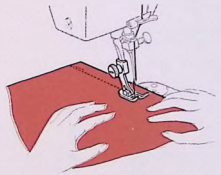
1. Leave presser foot in down position. Depress and hold reverse-stitch push button and run the machine at slow speed.
   - While holding reverse-stitch push button, back-stitch about 1.3cm (1/2") in from edge of fabric to reinforce end of seam.
2. Then release push button. With the take-up lever at its highest point, raise the presser foot and remove the fabric by drawing it back and to the left.
3. Cut thread ends on thread cutter at rear of presser bar.

### Guiding and Supporting Fabric

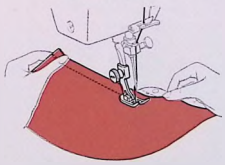
Most fabrics need only to be guided in front of the presser foot.

***CAUTION:*** *Do not pull the fabric as you apply gentle or firm tension while stitching, as this may deflect the needle, causing it to break.*

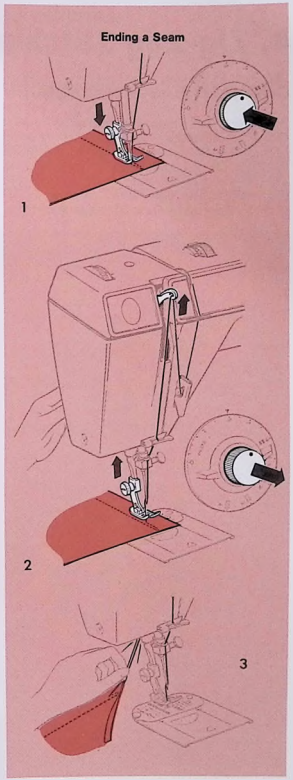
Some fabrics, such as filmy sheers, knits, etc., require support in front and back of the presser foot while being stitched.



Guiding Fabric



Supporting Fabric



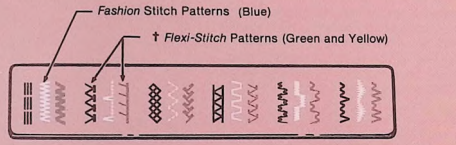
# 4. Zig-Zag Stitching

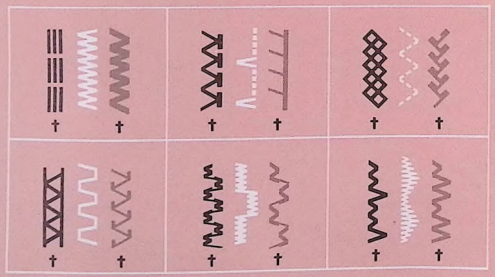
## *how patterns are produced*

There are two kinds of stitch patterns built into your machine: *Fashion** Stitch patterns and *Flexi-Stitch** patterns. The *Fashion* Stitch patterns, color-coded blue on your machine are produced by the side to side movement of the needle. The *Flexi-Stitch* patterns, color-coded green and yellow (identified by † in the illustration below) are produced by both the side to side movement of the needle and the back and forth movement of the feed to produce multi-purpose and decorative stitch patterns.

The six groups of three stitches each that are built into your machine are illustrated below.

**STITCH PATTERN GROUPS**



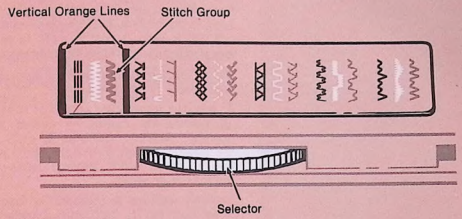
†SLOW speed setting is recommended for sewing *Flexi-Stitch* patterns and a lighter-than-normal pressure dial setting may be needed for some fabrics. This stitch is designed for strength and permanence and cannot readily be ripped out without risk of fabric damage.



## *selecting and adjusting zig-zag stitches*

### SELECTING A PATTERN GROUP

When you rotate the pattern group selector, one of six different groups of pattern stitches is available to you. Rotate the pattern group selector as required, until the vertical orange lines frame the desired group of three stitches.

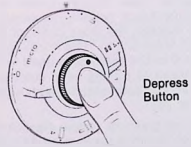



**Pattern Group Selector**

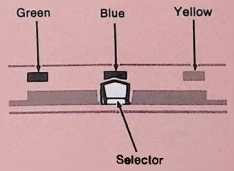
### SELECTING A STITCH PATTERN

The stitch pattern selector lets you choose one of the three stitches from the group you have selected. Notice the color of the stitch you have chosen: green, yellow or blue .

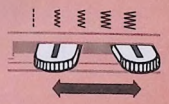
**To select any pattern,** depress and hold reverse-stitch push button while sliding pattern selector until it is aligned with corresponding color.



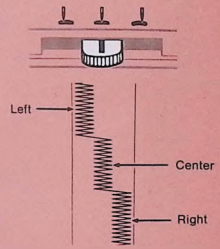

**Reverse-Stitch Push Button**



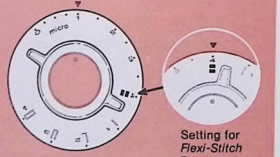

**Stitch Pattern Selector**



Adjusting Width of Design




Adjusting Stitch Placement




Stitch Length Selector

## ADJUSTING WIDTH OF THE DESIGN

*Before moving stitch width selector, always raise needle above fabric.*

To produce a zig-zag stitch, the stitch width selector must be moved from ⋮ toward the right. The further you move the selector lever toward the right, the wider your stitch will be.

## ADJUSTING STITCH PLACEMENT

*Before moving needle position selector, make sure needle is above fabric.*

A needle position selector setting of ⊥ places the needle in center stitching position. Selector settings ⊥ and ⊥ place the needle in left and right stitching position at stitch width settings narrower than the maximum width.

Selector setting ⊥ (center) is used most often. Settings ⊥ (left) and ⊥ (right) are for special placement of stitching. For example, a ⊥ (left) setting is used for button sewing. A ⊥ (left) or ⊥ (right) setting is used to place narrow zig-zag stitching to the left or right of center in decorative work.

## ADJUSTING STITCH LENGTH

When you are preparing to do zig-zag stitching, make a test sample with the fabric and thread you plan to use so that you can adjust the stitch length correctly.

Any stitch length setting from **1** to **4** will give you an open zig-zag stitch of whichever *Fashion* Stitch pattern you select. The higher the number, the more open, or farther apart, your stitch will be. The micro area between **1** and **0** of the selector is used for the fine adjustment of zig-zag satin stitching. For information on satin stitch length adjustment, see page 28.

For all green or yellow *Flexi-Stitch* patterns, stitch length is controlled with a single setting of the stitch length selector. Simply rotate it until the (Green/Yellow) mark is under the triangle above the selector.



## ADJUSTING NEEDLE-THREAD TENSION

When you are preparing to do zig-zag stitching, make a test sample with the fabric and thread you plan to use so that you can adjust the needle-thread tension correctly.

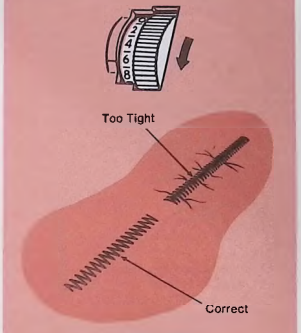
Zig-zag stitching requires less tension than straight stitching. Notice the stitching on your test sample. The stitches should lie flat against the fabric without causing the fabric to pucker. If the stitches are not flat and the fabric is puckering, lower the tension by turning the dial to a lower number.

## ADJUSTING STITCH BALANCE

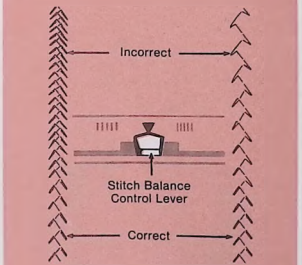
When you are using a *Flexi-Stitch* pattern you may need to balance your stitching in order to achieve the correct pattern (see illustration).

Before you move the stitch balance control lever from its neutral position (lever at center of ▼), make a test sample. If adjustment is required, stitch slowly and move the stitch balance control lever as you sew.

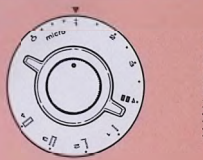
- Slide the lever toward ⁞⁞⁞⁞ symbol to separate the forward and reverse stitches of the pattern.
- Slide the lever toward ⁞⁞⁞⁞ symbol to bring the forward and reverse stitches of the pattern together.

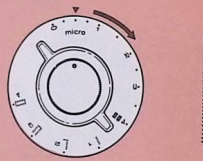



Needle-Thread Tension

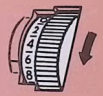


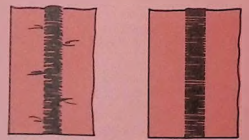

Adjusting Stitch Balance





As Dial Is Turned, Stitches Close Up





Incorrect Correct

Tension Adjustment for Satin Stitching

### SATIN STITCHING

Satin stitching is a series of closely spaced zig-zag stitches that form a smooth satin-like surface. It is useful for both utility and decorative work. Always make a test sample first so that you can adjust the stitch length and thread tension properly.

Soft fabrics may require a backing to ensure firm satin stitching. Crisp organdy and lawn are suitable for this purpose.

- Pattern Group: (Blue)
- Stitch Width:
- Needle Position:
- Stitch Length: Between **0** and **1**
- Special Purpose Presser Foot
- Zig-Zag Needle Plate

### Adjusting Stitch Length

1. Turn selector dial to **1** and run the machine at a slow speed.
2. While running machine, gradually turn dial toward **0** until stitches are closely spaced and form a smooth satin stitch.
3. When a smooth satin stitch has been obtained, you may run the machine at any desired speed.

### Adjusting Thread Tension

Satin stitching requires less tension than straight stitching or open zig-zag stitching. Furthermore, the wider the stitch, the lighter the tension on the thread must be.

Notice the stitching on your sample. If the stitching appears to be too tight, or the fabric is puckering, lower the thread tension by turning the dial to a lower number.



# 5. Twin-Needle Stitching

By using a twin needle, you can produce simultaneously two parallel, closely spaced lines of straight or zig-zag stitching. Effective for decoration, twin-needle stitching is not recommended for seams or for use on knits.

## *preparation*

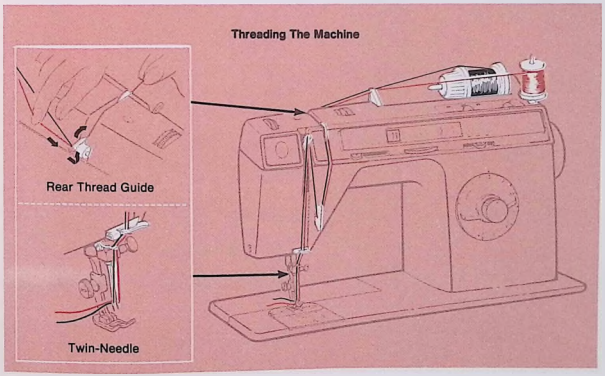
1. Thread machine with first thread from horizontal spool pin as instructed on page 10, making certain thread passes between tension separator and **left-hand** tension disc.
2. Wind bobbin with enough thread to complete stitching. (Since a bobbin cannot be filled after a twin needle is inserted, it is wise to keep an extra wound bobbin at hand for replacement.)

**Note:** When inserting a previously wound bobbin, follow the instructions on page 15.

3. Close slide plate and pull out a loop of thread between the needle and bobbin.
4. Cut thread about 10cm (4") from needle, and unthread the needle.
5. Remove the single needle.
6. Before inserting the twin needle, place the needle position selector at center and stitch width selector at .

## *threading the twin needle*

1. Raise presser foot.
2. Insert twin-needle spool pin into hole provided for it in machine top cover.
3. Pass the horizontal spool pin thread through **right** eye of needle.
4. Place vertical spool of thread on detachable spool pin and thread machine as for one-needle stitching *except:*
   - Pass thread between tension separator and **right-hand** tension disc. Continue to thread all other threading points.
   - Pass thread through **left** eye of needle.



## machine settings

### STRAIGHT STITCHING WITH A TWIN NEEDLE

- Stitch Width:
- Needle Position:
- Stitch Pattern: Any Blue Pattern
- Zig-Zag Presser Foot
- Zig-Zag Needle Plate
- Speed: **MIN.**

### ZIG-ZAG STITCHING WITH A TWIN NEEDLE

- Pattern Group: Any Zig-Zag Pattern
- Stitch Width: †
- **Note:** Do not exceed this stitch width setting.
- Needle Position:
- Zig-Zag Presser Foot (open patterns) or Special Purpose Foot (satin stitching)
- Zig-Zag Needle Plate
- Speed: **MIN.**

†**CAUTION:** Do not use a stitch width greater than what is recommended. A wider stitch will result in needle breakage.

## decorative twin-needle stitching

| To produce patterns at right, use settings shown below | | | | |
|---|---|---|---|---|
| Pattern Group Selector | (Yellow) | (Blue) | (Blue) | (Blue) |
| Stitch Pattern Lever | (Yellow) | (Blue) | (Blue) | (Blue) |
| Stitch Width † | | | | |
| Needle Position | | | | |
| Stitch Length | Green/ Yellow | 1-3 | Micro | Micro |

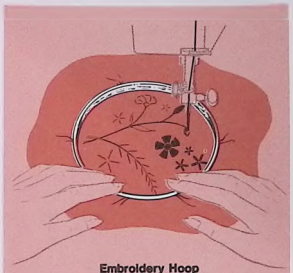


# 6. Free-Motion Stitching

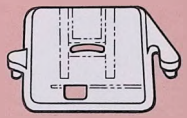
In free-motion stitching, you sew without a presser foot and control fabric movement by means of an embroidery hoop. Either a straight stitch or a plain zig-zag stitch can be used. Because you can move the hoop in any direction — forward or backward, from side to side, or even diagonally — free-motion stitching is extremely useful for embroidery designs. On the other hand, it is equally useful for darning.

If you are embroidering, you can vary the length of stitches simply by moving the hoop faster or slower under the needle. The faster you move the hoop, the longer the stitches will be. You can also vary the width of zig-zag stitches from wide to narrow by controlling the angle at which the hoop is placed and moved under the needle.

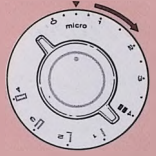
For darning, the embroidery hoop used in free-motion stitching enables you to hold the fabric taut — a real advantage when your fabric is lightweight or soft and thus likely to pucker. See page 63 for directions.



Embroidery Hoop



Snap-in Feed Cover

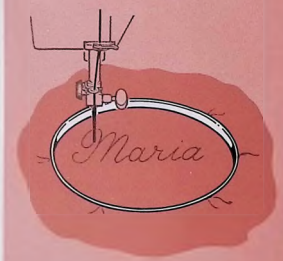


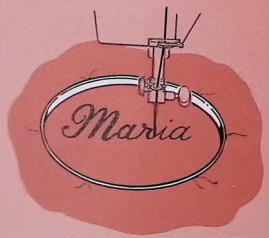

Stitch Length Selector

## preparation

1. Have available an embroidery hoop designed for machine use, large enough to encompass the entire design, but small enough so that hoop is easily managed.
2. Remove the presser foot.
3. Insert zig-zag needle plate and snap-in feed cover.
4. Rotate stitch length selector dial clockwise to **0**.

Script Lettering




## *script lettering*

- Pattern Group: (Blue)
- Stitch Width:
- Needle Position:
- Stitch Length: 0
- Presser Foot: None
- Snap-In Feed Cover
- Speed Range: To suit operator

If you wish to embroider a whole name on a dress or shirt, you can do so by free-motion stitching.

1. Always make a sample first to find the right stitch width.
2. Trace or mark lettering on right side of fabric.
3. If the fabric is soft or loosely woven, add an underlay of crisp lawn or organdy.
4. Place work in embroidery hoop designed for machine use. Be sure fabric is held taut.
5. Position work under needle and *lower presser bar to engage tension.*
6. Hold needle thread loosely and turn hand wheel toward you to bring bobbin thread up through fabric at start of design. Hold both thread ends and lower needle into fabric.
7. Stitch, following outline of lettering. Maintain an even rate of speed for uniformly spaced stitches.
8. To produce a close satin stitch, move hoop slowly; to produce an open stitch, move hoop more rapidly.
9. To shade the lettering from wide to narrow stitching, turn the work slightly so that you will be moving it at an angle as you stitch.



## *floral designs*

- Pattern Group: (Blue)
- Stitch Width:
- Needle Position:
- Stitch Length: 0
- Presser Foot: None
- Snap-In Feed Cover
- Speed Range: To suit operator

With a little practice on your sewing machine, you will be able to embroider flowers to decorate table linens and other household items, as well as dresses and blouses. If you have designing skill, you will enjoy creating your own designs. Otherwise, you can buy attractive transfer patterns.

To embroider flower designs, prepare the machine and your fabric by following the same steps as for script lettering (page 32). On your test sample, try out different stitch width settings to determine the one or more best suited to your design.

When filling in outlines, place stitches in parallel lines, shifting the hoop movement as appropriate to the design.

- For a smooth satin stitch that will catch the light, place the parallel stitches close together, moving the hoop slowly and steadily.
- For an irregular texture, move the hoop more rapidly, allowing some stitches to overlap.

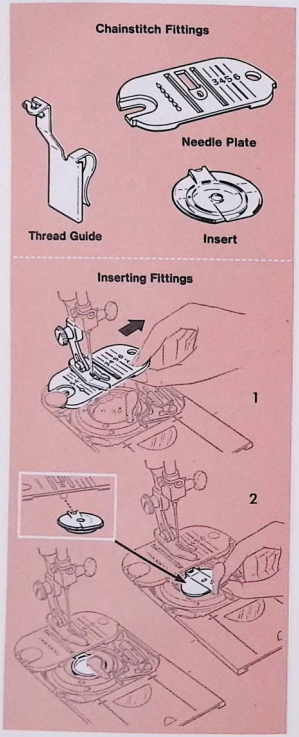
A series of bar tacks can be used to form spray-like leaves or flowers.

Flower Design

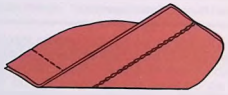
Bar-Tack Design

Flower, Leaf and Bud Design

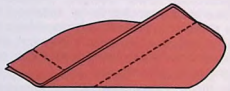
# 7. Chainstitching




Single-thread chainstitching looks like regular stitching on top but is a series of interlocking loops on the underside of the fabric. The stitches are formed by the needle thread alone *so you do not need a bobbin thread or bobbin.* Because the stitches are formed by a single thread, the entire line of stitching can be removed easily by just a pull on the thread end. Chainstitching is ideal for basting and wherever temporary stitching is desired.



Chainstitch



Regular Straight Stitch

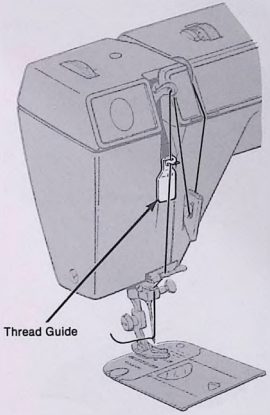
## *preparation*

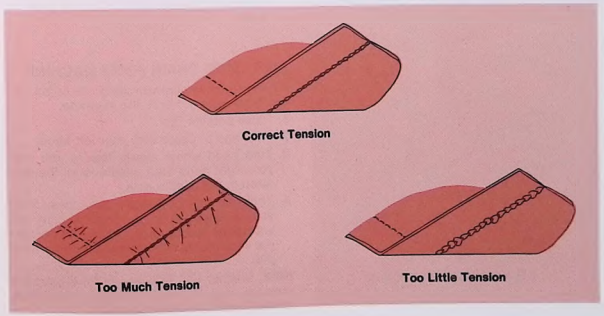
*Make sure the needle is at its highest point*

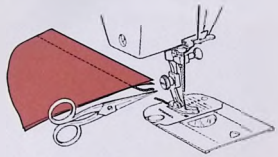
1. Raise presser foot, open slide plate, and remove bobbin.
- Remove needle plate.
2. Insert chainstitch needle plate.
- Position insert in bobbin case as illustrated.

3. Slip retaining clip of chainstitch thread guide over bottom edge of take-up lever slot as illustrated.
- With presser foot raised, thread your machine in the regular way except, pass thread from take-up lever through eyelet in the chainstitch thread guide. Soft, pliable threads of light and medium weight are best for chainstitching.

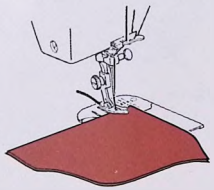
Chainstitching requires approximately the same needle-thread tension as regular straight stitching. When tension is correctly adjusted, the chain will be flat and smooth. If the fabric puckers and loops are pinched, turn tension dial to a lower number. If loops are large and irregular, turn tension dial to a higher number.



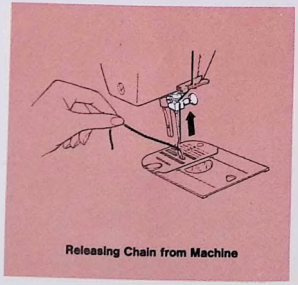





Chaining Off



Stitch Starting Point after Chaining Off



Releasing Chain from Machine

# *sewing a chainstitch seam*

- Pattern Group: (Blue)
- Stitch Width:
- Needle Position:
- Stitch Length: **2.5**
- Chainstitch Needle Plate
- Straight Stitch Foot
- Chainstitch Thread Guide
- Chainstitch Insert

## STARTING AND CHAINING OFF

1. Turn hand wheel toward you to position needle in very edge of fabric. Lower the presser foot.
2. Start the machine and stitch to end of seam. Continue stitching beyond edge of fabric, making a chain about 2.5cm (1") long. *Do not attempt to stitch in reverse.* Chainstitching can be sewn in a forward direction only.
3. Cut chain between fabric and presser foot.
4. After chaining off, start a new line of stitching by raising the presser foot slightly and positioning the fabric in front of the needle. Lower the presser foot and stitch to end of seam.

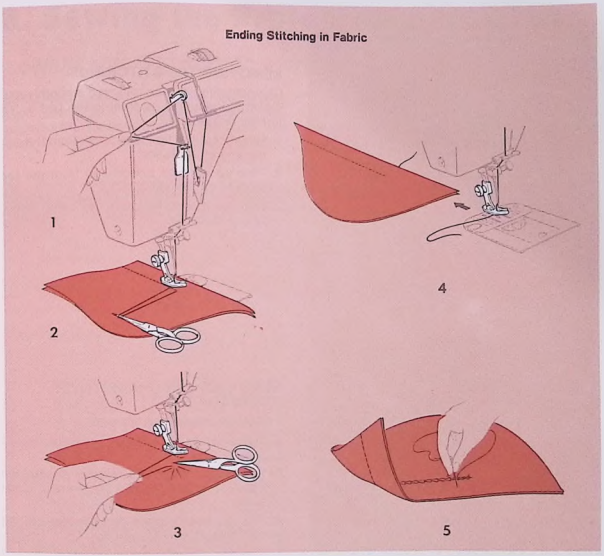
## RELEASING CHAIN FROM MACHINE

When you finish chainstitching, the chain can easily be removed from the machine.

1. Raise presser foot.
2. Hold end of chain with your left hand.
3. Turn hand wheel slowly *toward* you with your right hand until needle is all the way down in the needle hole.
4. Then turn hand wheel slowly *away* from you, pulling gently on chain, which will unravel as needle rises. *This is the only time you should ever turn hand wheel away from you.*

**Note:** Presser foot is removed for illustrative purpose only. It is not necessary to remove presser foot to release chain.





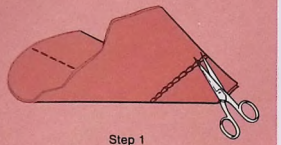

## ENDING STITCHING IN FABRIC

Occasionally, you may need to end your stitching in the fabric. Temporary hems and tucks, for example, can be completed in this way:

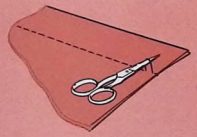
- Stop stitching at desired point. Make sure take-up lever is in its highest position.
- Raise presser foot.

1. Pull the thread through the take-up lever, forming a loop between the take-up lever and chainstitch thread guide.
2. Pass scissors under the presser foot so as to pull the slack thread down and out to form a loop at left of foot.
3. Hold the loop and cut the thread close to the end of the stitching.
4. Remove fabric from machine by pulling it straight back, away from you. The thread end will pull through the fabric to the underside and form a temporary lock.
5. If you wish to secure this temporary lock, fold the thread end back over the chain and fasten with hand stitching.

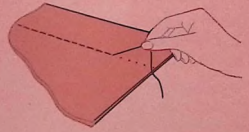
**Removing the Stitching**



Step 1



Step 2



Step 3

## REMOVING THE STITCHING

Chainstitching can be removed smoothly and cleanly in seconds by freeing the last stitch formed in the fabric.

1. Simply cut the last loop formed on the underside of the fabric.
2. Pick up the free thread end from the top surface of the fabric.
3. Pull the free thread end, removing entire line of stitching.

## REMOVING THE CHAINSTITCH ACCESSORIES

1. Release chain from machine.
2. Raise needle to its highest position, and *lift presser foot.*
3. Open slide plate and remove chainstitch insert. Replace bobbin and snap down latch.
4. Change needle plate and foot to suit the next sewing you wish to do.
5. Remove thread from chainstitch thread guide, and then remove guide.



# 8. Sewing the Professional Way

## *sewing knit and stretch fabric*

When you sew stretch fabrics, doubleknit, tricot and jersey, choose one of the stretch patterns that sews stretch into the seam. The table below will help you to select the right stitch pattern for your fabric and sewing job. *Remember to use a SINGER® ball-point (yellow band) needle, Catalog 2045, in your machine when you sew synthetic knit or stretch fabric.*

**STITCH PATTERN CHART**

| Stitch Pattern | Pattern Group | Stitch Length | Where to use |
|---|---|---|---|
| Straight Stretch† | (Green) | | Heavy-duty construction seams — Seam reinforcement — Dungaree seams — Crotch seams. |
| Plain Zig-Zag | (Blue) | Optional | General-purpose stretch sewing — Lingerie seams — Attaching stay tape — Seam finishing — Edge finishing — Attaching stretch lace. |
| Ric-Rac Stitch† | (Yellow) | | Heavy-duty, general- purpose sewing. |
| Chainstitching | (Blue) | 1.5-3 | Flexible basting — Hem-tape application — Double-stitched seams in delicate knits. |
| Overedge Stretch Stitch† | (Green) | | Overedge seams that stretch — Crotch seams — Waistband and seam finishes in shorts and slacks — Swimsuit construction. |
| Blindstitch | (Blue) | Optional | Blindstitch hemming — Overcast seam finishing — Shell hems in lingerie. |
| Slant Overedge Stretch Stitch† | (Yellow) | | Sweater and swimsuit construction — Overcast seams in bulky knits and stretch terry cloth — Attaching elastic and stretch lace — Edge finishes for seams, hems, and facings. |
| Honeycomb Stitch† | (Green) | | Attaching elastic and stretch lace — Lingerie and girdle repair — Swimsuit construction — Edge finishes for seams, hems and facings — Blanket binding. |
| Multi-Stitch Zig-Zag | (Blue) | Optional | Attaching elastic and stretch lace — Lingerie and swimsuit construction — Girdle seams — Seam Finishes — Casings and waistband finishes — Blanket binding. |
| Feather Stitch† | (Yellow) | | Swimsuit seams — Attaching stretch lace — Lingerie and girdle seams — Blanket binding. |
| Straight Feather Stitch† | (Yellow) | | Ideal for flat-butted seams, and where extra strength is required. |

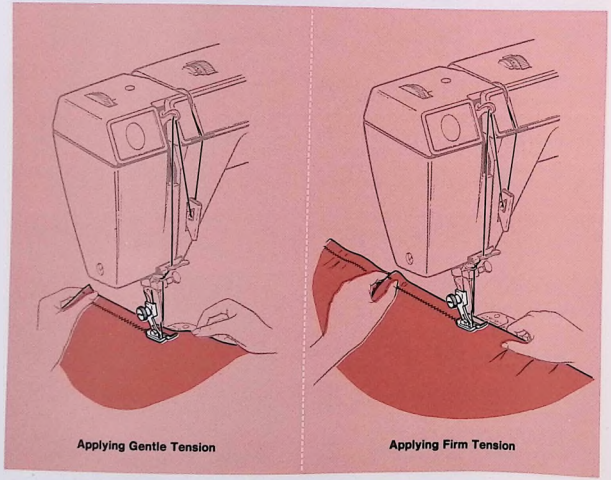
†This stitch is designed for strength and permanence and cannot readily be ripped out without risk of fabric damage.

## GUIDING AND SUPPORTING FABRIC

Most fabrics of stretch or knit construction need only to be guided in front of the presser foot. Some fabrics, however, require support while being stitched.

***CAUTION:*** *Do not pull the fabric as you apply gentle or firm tension while stitching, as this may deflect the needle, causing it to break.*

- For nylon tricot and similar synthetic knits, apply *gentle* tension by holding fabric in front and back of presser foot as you sew.
- For elasticized fabric, stretch lace, and knits with an unusual amount of elasticity, apply *firm* tension in front and back of the presser foot to stretch the seam as the stitches are being placed.



Applying Gentle Tension

Applying Firm Tension



## PLAIN STRETCH SEAMS

- Pattern Group: (Green)
- Stitch Width:
- Needle Position:
- Stitch Length: (Green/Yellow)
- Special Purpose Presser Foot
- Zig-Zag Needle Plate
- Speed Range: **MIN.**

When you use the straight stretch stitch for stress seams or to seam knit, stretch, and elasticized fabric, stretch and strength are built into the seam as it is being sewn. *Be sure to insert a ball-point (yellow band) needle, Catalog 2045, in the machine if you are stitching a synthetic knit fabric.*

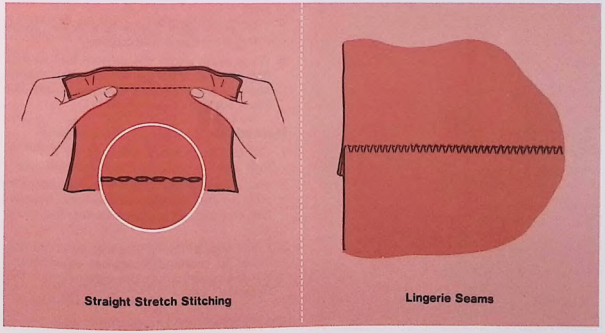
1. Make a test with a sample of your fabric so that you can adjust thread tension and stitch balance correctly (see page 27).
2. Stitch and guide the fabric as you do for plain seams stitched with the regular straight stitch, letting the machine make the back-and-forth stitches that give stretch to the seam. If the fabric has an unusual amount of elasticity, it should be guided and supported as instructed on page 40.
3. After stitching, press seam as when using the regular straight stitch.

## LINGERIE SEAMS

- Pattern Group: **(Blue)**
- Stitch Width:
- Needle Position:
- Stitch Length: To suit fabric
- Zig-Zag Presser Foot
- Zig-Zag Needle Plate

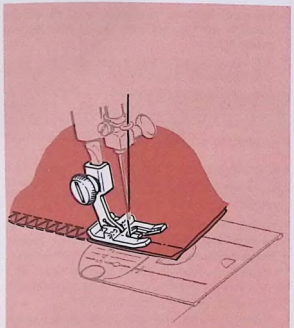
To make a lingerie seam both durable and flexible, use a zig-zag stitch. This treatment is particularly suitable for bias seams.

1. Straight-stitch the seam (with stitch width selector at ) on the wrong side.
2. Press both seam allowances in the same direction.
3. From the right side, top-stitch with zig-zag pattern, letting the needle alternately enter the seam line and seam thickness.

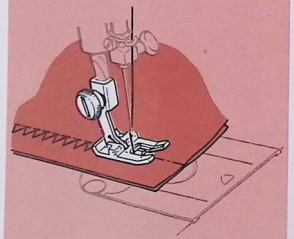


Straight Stretch Stitching

Lingerie Seams



Method No. 1



Method No. 2

## OVEREDGED SEAMS

Seams in knit and stretch fabric can be joined and finished in one operation. Two different methods may be used. Method No. 1 is recommended for firm fabrics where a 6mm (1/4") seam allowance is adequate. Method No. 2 is recommended for bulky knits and fabrics that have a tendency to curl or fray and where a wider seam allowance is needed for support. Make a test sample to help you decide which method is best for your fabric and garment. *Remember to use a Catalog 2045 ball-point (yellow band) needle if you are sewing a synthetic knit.*

- Pattern Group: (Green)
- Stitch Width:
- Needle Position:
- Stitch Length: (Green/Yellow)
- Special Purpose Presser Foot
- Zig-Zag Needle Plate
- Speed Range: **MIN.**

### Method No. 1 — Overedging

1. Cut and fit the garment, allowing for a 1.6cm (5/8") seam allowance. Baste seam line.
2. Trim seam edge evenly to a scant 6mm (1/4") from seam line basting.
3. Place seam under the presser foot so that the straight stitches fall on the basted seam line and zig-zag stitches toward the seam edge, as illustrated.

### Method No. 2 — Mock Overedging

1. Cut and fit garment, allowing for a 1.6cm (5/8") seam allowance. Baste seam line.
2. Place seam under presser foot so that the straight stitches fall on the basted seam line and zig-zag stitches toward the seam edge.
3. Press after stitching and trim away excess fabric to produce a narrow seam edge. When seam supports the garment, omit the trimming step.



## ATTACHING ELASTIC

- Pattern Group: (Green)
- Stitch Width:
- Needle Position:
- Stitch Length: Approx. **1.5** (for **Blue** Pattern) or (Green/Yellow)
- Zig-Zag Presser Foot and Needle Plate
- Speed Range: **MIN.**

### To Attach Waistline Elastic

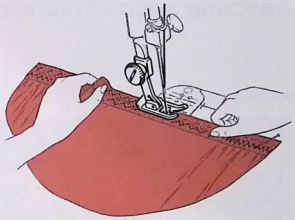
- Fit elastic for desired snugness at waistline, allowing 1 inch (2.5cm) for joining. Lap ends to form a band and straight stitch together as shown using a ball point needle.
- Divide elastic band into four equal segments and mark with pins. Do the same to the garment. Then pin together at corresponding points, pinning elastic over right side of fabric, top edges even.
- Sew a few straight stitches to anchor elastic to fabric.
- Select honeycomb.
- Then hold elastic and garment edge taut as you stitch so that it will remain stretchable after stitching is completed.

***CAUTION:*** *Do not pull the fabric while you are stitching as this may deflect the needle, causing it to break.*

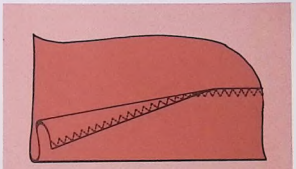
## FINISHES FOR HEMS AND FACINGS

- Pattern Group: (Green) or (Blue)
- Stitch Width:
- Needle Position:
- Stitch Length: to suit fabric and stitch
- Special Purpose Presser Foot
- Zig-Zag Needle Plate
- Speed Range: **MIN.**

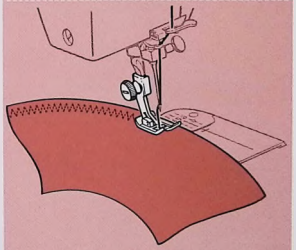
- Make a test sample first.
- Place stitching about 3mm (1/8") in from hem or facing edge.
- Press after stitching and trim away excess fabric close to the stitching line.



Attaching Elastic



Finished Hem Edge



Applying Facing Finish

# handling special fabrics

Many fabrics because of their construction or finish, demand special attention in sewing. Techniques used in stitching and handling, and choice of machine accessories, will vary with the fabric. Let the table below guide your selection.

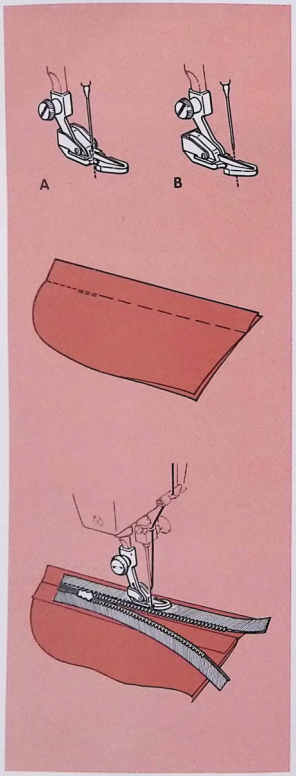
## FABRIC HANDLING TABLE

| Fabric | Special Handling |
|---|---|
| Vinyl — leather-look, patent, suede, reptile | Use transparent tape as a substitute for pins or basting — Topstitch to hold seams and edges flat — Avoid worked (machine buttonholes. Use bound buttnholes. |
| Pile — velvet, velveteen, corduroy | Stitch in direction of nap — Use plain seams — Zig-Zag or bind seam edges to prevent fraying — Press over a self-fabric cloth. |
| Deep Pile — fake fur | Pin rather than baste seams — Stitch in direction of nap — Use plain seams for short-hair furs; narrow overedged seams for shaggy, bulky furs — Shear pile from seam allowances to reduce bulk. |
| Permanent Press — percale, broadcloth, shirting | Control seam tension manually by holding fabric taut as it passes under the presser foot. Sew at moderate speed. |
| Fine Knits — tricot, jersey | Use narrow overedged, double stitched, or French seams — Hold thread ends securely for a few stitches at start of seam — Support seams while stitching. See page 45 to increase presser-foot pressure. |
| Blanket Binding — satin face | Hand-baste binding to blanket (pin marks show) — Miter corners. |
| Soft Sheer — chiffon, voile, China silk | Use French seams, double stitched — Hold ends of upper and lower thread when you begin to stitch — Support fabric while stitching. |
| Napped Fabric — casmere, mohair, camel hair | Cut with nap running down — Sew in direction of nap — Topstitch to hold seams and edges flat. |



| Stitch Length-type | Needle Style-Size | Machine Accessories |
|---|---|---|
| Long Straight Stitch | Style 2020 Size 14 or 16 for woven backing<br>Style 2045 Size 14 or 16 for knit backing | General Purpose Foot †<br>General Purpose Needle Plate |
| Medium Straight Stitch for seams<br>Medium Zig-Zag or Honeycomb stitch for overcasting | Style 2020 Size 14<br>Style 2045 Size 14 or 16 for panné velvet | General Purpose Foot †<br>(General Purpose Foot *only* for overcasting)<br>General Purpose Needle plate |
| Long Straight Stitch for plain seams<br>Medium to Short Zig-Zag Stitch for overedged seams | Style 2020 Size 16 | General Purpose Foot †<br>General Purpose Needle plate |
| Medium Straight Stitch | Style 2020 Size 11 or 14 | Straight Stitch Foot and Needle Plate |
| Medium Straight Stitch<br>Medium to Short Narrow Zig-Zag or Narrow Overedge | Style 2045 Size 11 or 14 | Straight Stitch Foot and Needle Plate (for straight stitching)<br>General Purpose Foot and Needle Plate (for zig-zag stitching) |
| Long Straight Stitch<br>Medium to Long Zig-Zag Stitch or Decorative Stitch | Style 2020 Size 11 or 14 | General Purpose Foot †<br>General Purpose Needle Plate |
| Medium to Short Straight Stitch | Style 2020 Size 9 or 11 | Straight Stitch Foot and Needle Plate |
| Medium to Long Straight Stitch | Style 2020 Size 11 or 14 | General Purpose Foot †<br>General Purpose Needle Plate |

† For best results when sewing this fabric, we recommend use of the Even Feed Foot, available at your Singer Sewing Centre.




# construction details

## Zipper Insertion

How the zipper is inserted will depend on the type of the garment and the location of the zipper. With the adjustable zipper foot, you will find it easy to sew an even line of stitching close to the zipper. For inserting the zipper foot on machine see page 5.

- Pattern Group: Any Blue Pattern
- Stitch Width:
- Needle Position:
- Stitch Length: To suit fabric
- Zipper Foot

The zipper foot can be used either to the left or right of the needle — depending on where the bulk of the garment is placed.

**Attaching the Zipper Foot**

When the zipper foot is to the left of the needle:

- Attach left side of zipper foot to shank (needle will enter left notch in foot) — see illustration **A**.

When the zipper foot is to the right of the needle:

- Attach right side of zipper foot to shank (needle will enter right notch in foot) — see illustration **B**.

**Zipper Inserted under left Lapped Seam**

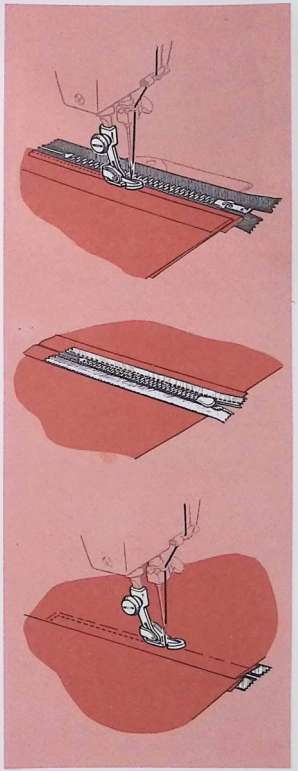
- Baste the seam line the exact length of the garment opening and press the seam open.
- Attach the zipper foot to the right of the needle (illustration **A**).
- Open the zipper.
- Flatten out the back seam allowance and place the zipper face down on it, as illustrated, with the edge of the zipper teeth following the seam line.
- Stitch the zipper tape onto the seam allowance.

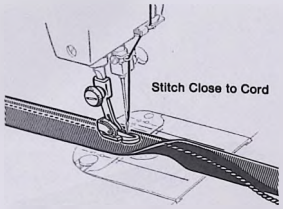


- Adjust the foot to the left of the needle (illustration **B** on page 46).
- Close the zipper and turn it face up.
- Smooth back the seam allowance at the edge of the zipper.
- Top stitch to the tape close to the folded edge.

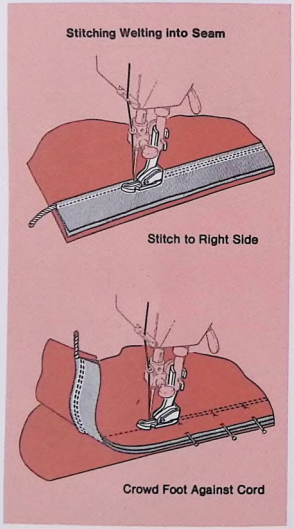
- Spread garment flat and turn zipper face down over front seam allowance.
- Hand baste zipper to garment from wrong side, through zipper tape, seam allowance, and front of garment.

- Turn garment right side out.
- Adjust zipper foot to right side of needle and stitch across the lower end of the zipper and up to the waistline, using the basting stitches as a guide.
- Remove bastings. Press.






Making the Welting




## Corded Seams

The corded seam is a professional treatment for slipcovers, children's clothes, blouses, and lingerie. To make a corded seam, make the welting first (or buy it ready-made), then stitch it into the seam. For both steps, use the following settings and accessories:

- Pattern Group: (Blue)
- Stitch Width:
- Needle Position:
- Stitch Length: Slightly longer than for regular seaming
- Zipper Foot
- Zig-Zag or Straight Stitch Needle Plate

### Making the welting

1. Buy cable cord (at a notions counter) of desired size.
2. Cut bias strips of fabric (width: three times the diameter of the cord plus 3cm (1-1/4").
3. Sew strips together on the lengthwise grain to obtain desired length.
4. Fold resulting strip over cord with raw edges even.
5. Attach zipper foot to the left of the needle. (For instructions on attaching zipper foot, see page 46).
6. Lower the presser foot.
7. Stitch close to the cord (but do not crowd stitching against cord), pulling *gently* on the strip, both in front and in back of the zipper foot.

### Stitching welting into seam

1. Attach zipper foot to the right of the needle so that the bulk of the fabric will fall to the left.
2. Stitch welting to the right side of a single seam edge; guide the edge of the foot next to the cord but do not crowd.
3. Place the attached welting over the second seam edge, and pin or baste together.
4. Place the work under the needle, with the first stitching on top so that you can use it as a guide.
5. Stitch, this time crowding the foot against the cord.



## DARTS

Darts add fit, contour, and styling to a garment.

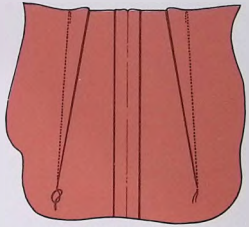
### Regular Darts

- Pattern Group: (Blue)
- Stitch Width:
- Needle Position:
- Stitch Length: About 2, or to suit fabric
- Zig-Zag or Straight Stitch Presser Foot
- Zig-Zag or Straight Stitch Needle Plate

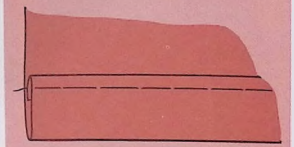
1. Stitch from the seam edge, tapering gradually to the point.
2. Stitch beyond the fabric to form a thread chain 2.5 to 5cm (1" to 2") long.
3. Tie thread ends into a single knot close to the stitching.

### Continuous-thread Darts

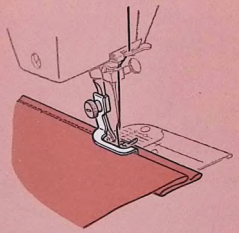
1. Set the machine as for regular darts.
2. To wind an empty bobbin with enough thread for a single thread dart up to 20cm (8") long, turn hand wheel over once by hand and cut off thread end. Make four additional turns of the hand wheel.
3. Close slide plate, and position the needle in the very edge of the fold, at the point of basted or pinned dart. Lower presser foot.
4. Stitch carefully from the point to the wide end of the dart at the seam edge.
5. Reinforce wide end of dart with reverse stitching and as work is removed from machine, bobbin will be completely emptied, ready for rewinding for next dart.



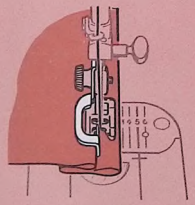
Regular Darts



Basted Guideline



Blindstitch Guide



Blindstitch Hem

## BLINDSTITCH HEMS

Blindstitching provides a durable hem finish that is almost invisible. It is best suited to straight hems. Taped, bound, turned, or unfinished hem edges can be blindstitched with equal ease. Blindstitching takes a little practice, however, so make a test sample first.

- Pattern Group: (Blue)
- Stitch Width: To suit fabric
- Needle Position:
- Stitch Length: 1 to 2.5
- Zig-Zag Presser Foot
- Zig-Zag Needle Plate
- Blindstitch Hem Guide

1. Mark, turn, and press hem in the usual way.
2. Baste a guideline at least 1.3cm (1/2") from the top edge of the hem so that the basting will not be caught by the flange of the blindstitch hem guide.
3. Attach the blindstitch hem guide to the presser bar (see Page 7).
4. With the work wrong side up and the bulk of the fabric to the left, turn the hem under, creating a soft fold about 6mm (1/4") from top edge of the hem.
5. Position the hem under the presser foot with the flange on the front of the guide resting on the 6mm (1/4") hem edge and the soft fold against the wall of the flange.
6. Stitch so that straight stitches fall on the hem edge and the sideward stitches pierce the soft fold. While stitching, feed the soft fold against the wall of the flange and guide the hem edge in a straight line.



## *buttons*

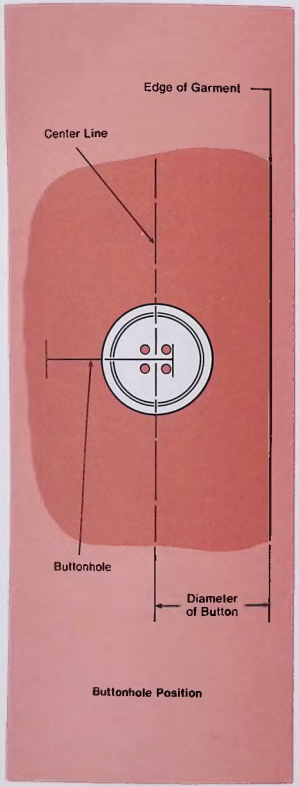
- Pattern Group: (Blue)
- Stitch Width: To suit button
- Needle Position:
- Button Foot
- Snap-In Feed Cover
- Speed Range: MIN.

Flat buttons can be sewn on quickly and easily using the plain zig-zag stitch.

The space between the holes in the button determines stitch width settings.

- Attach snap-in feed cover to zig-zag needle plate.

1. Set stitch width at and needle position selector at . Position button under foot and lower the needle into the center of the left hole. Lower the foot. Turn hand wheel toward you until needle rises out of button and is above the foot.
2. Move stitch width selector until needle is over the other hole in the button. Continue turning hand wheel until the needle is above right hole, adjust stitch width, as necessary, until needle enters center of the right hole. Take six or more zig-zag stitches and finish with the needle on the left side.
3. To fasten stitching, adjust stitch width to and take three or four stitches.
   - Remove work, draw threads to underside of fabric, fasten, and trim.




Buttonhole Position

# *buttonholes*

You have a choice between two methods of making bar-tack buttonholes; using the built-in four-step system, or manually controlling the selectors.

On pages 54 and 57, you will find detailed instructions for using the two methods; but you will find the following information basic to both.

1. Always make a test buttonhole on a sample of your fabric. Be sure to duplicate the thickness of the garment and include interfacing if appropriate.
2. Use No. 50 or finer mercerized cotton thread or embroidery thread, and reduce needle-thread tension to slightly less than normal.
3. Use a size 11 needle for embroidery thread and a size 14 needle for mercerized cotton thread.

## BUTTONHOLE POSITION

Accurate guidelines are essential to keep buttonholes at a uniform distance from the edge of the garment, evenly spaced, and on the grain of the material.

Mark the center line of the garment. This guideline can be made by hand basting. The space from the center line to the finished edge of the garment must be from 1.9cm (3/4") to the full diameter of the button. With this spacing, the button will not extend beyond the edge when the garment is buttoned. Make sure the center line marking follows a lengthwise fabric thread.



### Marking the Garment

- Mark a position guideline with hand basting for each buttonhole.
- Horizontal buttonholes are placed to extend 4mm (1/8") beyond the center line of the garment, as illustrated, so that buttons will be in the center of the figure when the garment is fastened. Horizontal buttonhole guidelines should follow a crosswise fabric thread and should be longer than the finished length of buttonhole. Mark ends of buttonhole vertically.
- Vertical buttonholes are placed on center line of garment, as illustrated. Mark ends of buttonhole horizontally across the center line basting and use the center line marking as the buttonhole guide when stitching.

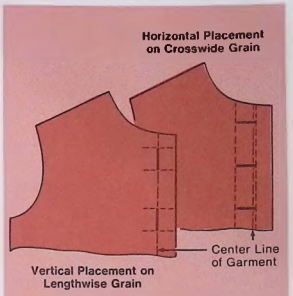
Spaces between buttonholes should be equal. When a line of buttonholes crosses the waistline, be sure that one buttonhole will fall exactly on the waistline. Then measure the other buttonhole markings from that point.

## BUTTONHOLE LENGTH

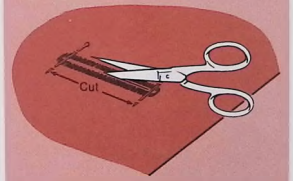
A buttonhole length should be just long enough to allow the button to slip through the opening without stretching it. You can estimate the proper buttonhole length by measuring the width plus the thickness of the button. To make sure the measurement is correct, cut a slit in a scrap of fabric the diameter of the button you intend to use. Increase length of opening until button slips through easily. This test is particularly advisable for buttons of unusual shape or thickness.

## CUTTING BUTTON OPENING

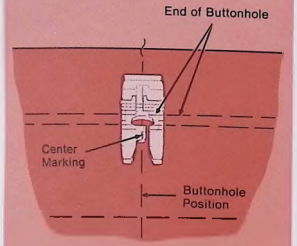
Place a pin across the cutting space at each end of the buttonhole to protect the end stitching. Use a pair of small sharp scissors to cut button opening. Insert blade in center of cutting space and cut from this point in either direction.



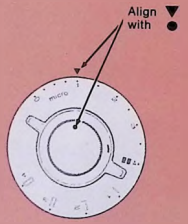
Testing Buttonhole Length




Cutting Button Opening




**Starting Position**




**Neutral Position**

## FOUR-STEP BUTTONHOLING

The four dial settings for buttonholing are located on the opposite side of the stitch length selector. As you turn the dial for each step, your machine is automatically set for the correct needle position, stitch width, and stitch length, as well as for stitching direction for that step. You need not turn the fabric during buttonholing.

- Pattern Group (Blue)
- Buttonhole Foot
- Zig-Zag Needle Plate

**Procedure:**

- Follow the instructions beginning on page 52 for preparing and marking the garment.
- Raise the needle above the fabric.
- Position the work under the buttonhole foot aligning center marking of buttonhole with center red line on the foot.
- Align end marking of buttonhole with the horizontal red lines on the foot.
- Set reverse-stitch push button in neutral position. Adjust if necessary to equalize difference in stitch density between left and right side of test buttonhole. Turn to page 56 for detailed instructions.



### Step 1: Side Stitching

With the needle raised above the fabric, turn the buttonhole dial clockwise to step **1**. Position needle in fabric at point **A**. Lower the foot and stitch to end of buttonhole (point **B**). The end marking should be aligned with the horizontal red lines on the foot.

### Step 2: Bar Tack

Raise the needle above the fabric. Turn buttonhole dial counterclockwise to step **2**. Take about six stitches to point **C**.

### Step 3: Side Stitching

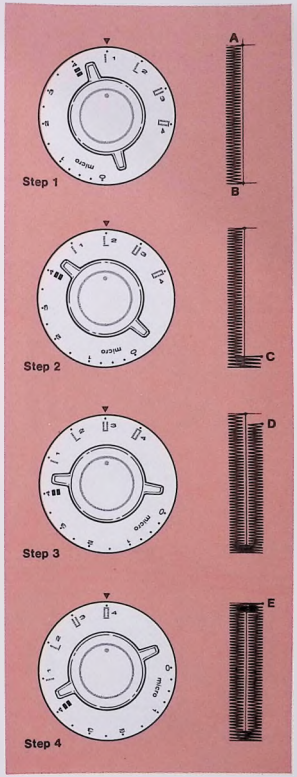
Raise the needle above the fabric. Turn buttonhole dial counterclockwise to step **3**. Stitch to within two stitches of the end of the buttonhole (point **D**).

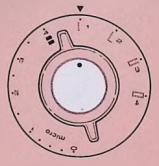
### Step 4: Bar Tack

Raise the needle above the fabric. Turn buttonhole dial counterclockwise to step **4**. Take about six stitches to point **E**. For a smooth, satin appearance and greater durability, stitch around the buttonhole a second time by repeating the four-step sequence.

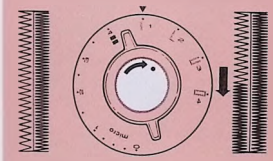
Remove the work, draw threads to the underside, tie, and trim. Cut button opening with sharp scissors as instructed on page 53.

When buttonholes are completed, rotate dial counterclockwise to stitch length settings to set machine for regular stitching.





Neutral Position



To Increase Density on Left Side

To Increase Density on Right Side

### Adjusting Forward-Reverse Stitch Balance

Differences in stitch density between the left and right sides of the buttonhole (forward and reverse stitching) are equalized by adjusting the reverse-stitch push button. A very slight rotation of the button will produce a noticeable change.

1. Make a test buttonhole with the push button in neutral position (indicator dot directly below ▼ symbol on control panel).
2. If the stitches on the left side of the buttonhole are too open, rotate the push button clockwise from its neutral position to increase density of stitching.
3. If the stitches on the right side of the buttonhole are too open, rotate the push button counterclockwise from its neutral position to increase density of stitching.

After buttonhole stitching is completed, return push button to its neutral position (indicator dot directly below ▼ symbol on control panel).



## BUTTONHOLES (MANUAL METHOD)

### Settings:

- Pattern Group: (Blue)
- Stitch Width: See Below
- Needle Position:
- Stitch Length: Between 0 and 1
- Buttonhole Foot
- Zig-Zag Needle Plate
- Speed Range: MIN.

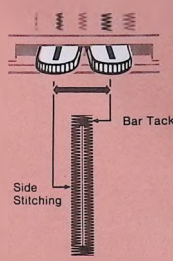
Always make a test buttonhole on a sample of your fabric. Be sure to duplicate the thickness of the garment and include interfacing if appropriate.

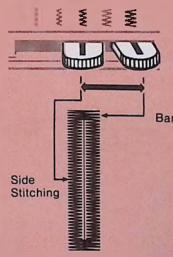
Follow the instructions beginning on page 52 for preparing and marking the garment.

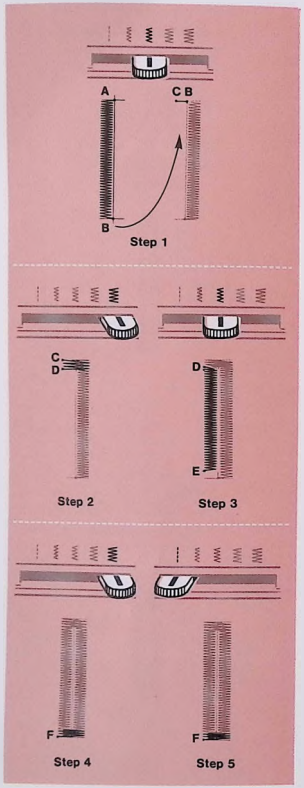
### Stitch Width Settings

You will use two stitch width settings: one for side stitching and one for the bar tacks (the closings at each end of the buttonhole). These stitch widths may vary according to the size of the buttonhole required. Two possible combinations are illustrated at the right.

Stitch Width Selector Settings






**Procedure**

Place work under needle, aligning center marking of buttonhole with the black line in the center of the special purpose foot.

**Step 1: Side Stitching**

Position needle in fabric at point **A**. Lower the foot and stitch to end of marking. Leave needle in fabric at point **B**. Raise foot and pivot work on needle. Lower the foot. Take one stitch without changing stitch width setting, bringing work to point **C**.

**Step 2: Bar Tack**

Adjust stitch width selector for bar tacks, and take about six stitches. Stop at point **D**.

**Step 3: Side Stitching**

Readjust stitch width selector for side stitching. Complete work to point **E**. Leave needle in fabric.

**Step 4: Final Bar Tack**

Adjust stitch width selector for bar tacks, and take about six stitches ending at point **F**.

**Step 5: Fastening Stitch**

To secure stitching, move stitch width selector to ⋮ and take three stitches. Remove work, draw threads to underside, fasten, and trim. Cut opening for button with sharp scissors.



## *decorative touches*

### MONOGRAMS AND MOTIFS

Many of the decorative stitch patterns can be used for monograms or motifs. You can buy designs or create them yourself.

**Stitching a Monogram or Motif**

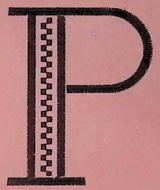
- Pattern Group: Any pattern
- Stitch Width: ⋮
- Needle Position:
- Stitch Length: To suit fabric and stitch
- Special Purpose Presser Foot
- Zig-Zag Needle Plate
- Speed Range: **MIN.**

1. Make a sample first to determine suitability of stitch pattern and to find the right stitch width and stitch length settings.
2. Transfer the design (by tracing, usually) to the right side of the fabric.
3. If the fabric is soft or loosely woven, baste a backing of lawn or organdy onto the wrong side.

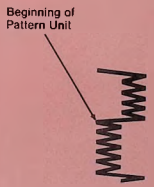
**Finding the beginning of the pattern unit**

When you use decorative stitch patterns in a motif, always start stitching at the beginning of the pattern unit. To find the beginning.

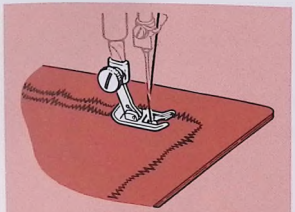
1. On a scrap of material, stitch until you come to the end of a complete pattern unit. Now you are ready to start stitching at the beginning of the next unit.
2. Raise the presser foot and remove scrap material.
3. Position motif under the needle, lower the presser foot, and stitch.
4. After stitching, trim the backing, if used, close to the stitching.



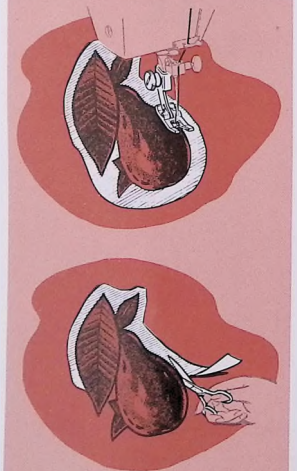
Monogram in Zig-Zag and Domino Stitch




Domino Stitch



Top Stitching



Method No. 1
Trimming After Stitching

## TOP STITCHING

A practical simple way to accent the lines of a dress or coat is to place one or more rows of stitching along collars, lapels, facing edges, pockets, sleeves, etc. For a tailored look, use rows of straight stitching. For decorative interest, use a stitch pattern.

## APPLIQUÉ

Appliqué adds beauty and interest to clothes and household linens. Either contrasting or self fabric can be used effectively.

The stitch most commonly used in appliquéing is the plain zig-zag stitch (see page 28), closely spaced to form a satin stitch. The width of this stitch can be varied to accommodate fabrics of different weaves and textures. Many of the other stitch patterns can be used to appliqué with decorative stitching.

To prepare for appliquéing, make a sample to help you decide which of the following two methods is more appropriate for your fabric and design.

- Mark design on piece of fabric to be appliquéd.
- Cut out design leaving about 2cm (3/4") margin all around.
- Position the design.
- Baste it to the fabric.
- Attach special purpose foot.

### Method No. 1

1. Select a stitch pattern suitable for the desired sewing application. Set stitch width selector for the desired width. For white patterns, set stitch length dial for satin stitching between **0** and **1** (micro area); for green and yellow patterns, set it on (Green/Yellow).
2. Outline the entire design with appliqué stitching.
3. Trim away excess fabric on the outer edges of the stitching. Remove basting.



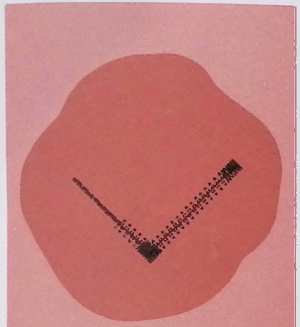
### Method No. 2

1. Select a stitch pattern suitable for the desired sewing application.
2. Adjust stitch width selector for regular straight stitching and outline the entire design with a short stitch.
3. Trim raw edges to the stitching.
4. Adjust stitch width selector to desired width setting for appliqué pattern, and set stitch length selector in micro area between **0** and **1** (or on (Green/Yellow) if using one of the green or yellow *Flexi-Stitch* patterns).
5. Stitch, following and covering straight-stitch outline. This step will produce smooth overedged finish with no raw edges to be trimmed.

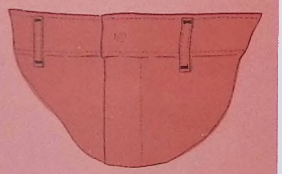
### Method No. 3

- Purchased motifs can be appliquéd quickly and easily by using a straight or decorative stitch.

Method No. 2
Stitching After Trimming



A Tear Mended with Multi-Stitch Zig-Zag



Bar-Tacked Belt Loops

# *keeping up appearances*

## MENDING

Many of the zig-zag stitch patterns are just as useful for mending as they are for creative sewing. The multi-stitch zig-zag (White ) forms a firm, flexible bond for repairing tears and for replacing elastic. The plain zig-zag (White ) is useful for making bar tacks to repair lingerie.

### Tears

- Pattern Group: (Blue)
- Stitch Width:
- Needle Position:
- Stitch Length: About 1 or to suit fabric
- Zig-Zag Presser Foot
- Zig-Zag Needle Plate

1. Trim ragged edges.
2. Place underlay on the wrong side of tear for reinforcement. (It is best not to baste or pin the underlay since you will be bringing the edges of the tear together in the next step.)
3. Stitch on the right side, bringing the edges of the tear together.
4. Shorten stitch length at ends and corners to give extra strength.
5. Trim underlay.

### Bar Tacks

Use the plain zig-zag stitch ( Blue ) at satin-stitch length between **0** and **1** (micro area) for belt loops, pockets, zippers, shoulder straps, etc.



## DARNING

You may choose to darn either with or without an embroidery hoop. When greater control is needed, an embroidery hoop is usually best.

### Darning Without Embroidery Hoop

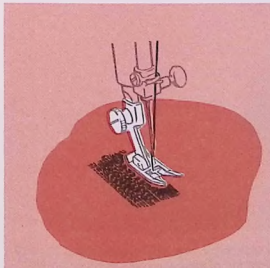
- Pattern Group: (Blue)
- Stitch Width:
- Needle Position:
- Stitch Length: **1.5**
- Zig-Zag Presser Foot
- Zig-Zag Needle Plate
- Pressure Dial: **0**

1. If area to be darned is open, baste an underlay in place.
2. Place area to be darned under the presser foot. Lower the presser foot and start stitching, alternately drawing the fabric toward you and gently pulling it away from you until area is filled with parallel lines of stitching.
3. For additional strength, cover area with crosswise lines of stitching.

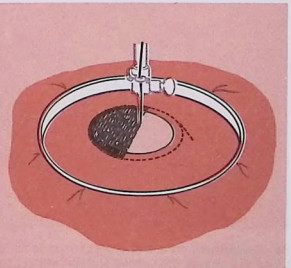
### Darning With an Embroidery Hoop

- Pattern Group: (Blue)
- Stitch Width:
- Needle Position:
- Stitch Length: **0**
- Presser Foot: None
- Snap-In Feed Cover

1. Trim ragged edges from area to be darned and center worn area in embroidery hoop designed for machine use.
2. Carefully position work under needle and lower presser bar to engage tension.
3. Hold needle thread loosely with left hand, turn hand wheel toward you, and draw bobbin thread up through fabric. Hold both thread ends and lower needle into fabric.
4. Reinforce the area to be darned with stitching 6mm (1/4") from the edge. Stitch across opening, moving hoop under needle at a slight angle from lower left to upper right. Keep lines of stitching closely spaced and even in length.
5. When opening is filled, cover area with crosswise lines of stitching.



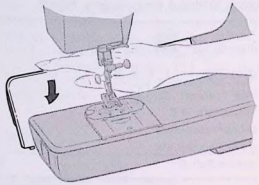
Darning Without Embroidery Hoop



Darning With Embroidery Hoop

# 9. Free-Arm Sewing

Fabric handling, when sewing tubular and hard to reach garment areas, is simplified when you convert your sewing machine to free-arm sewing. Some of the sewing jobs for which you will find the free arm particularly useful are shown on this and the following pages. You will discover many more for yourself.

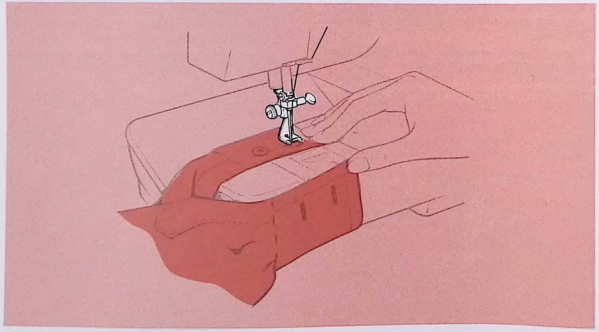


## *preparation*

To convert to free-arm sewing, simply press down on corner of *Flip & Sew* panel on sewing machine with heel of right hand.

## *applications*

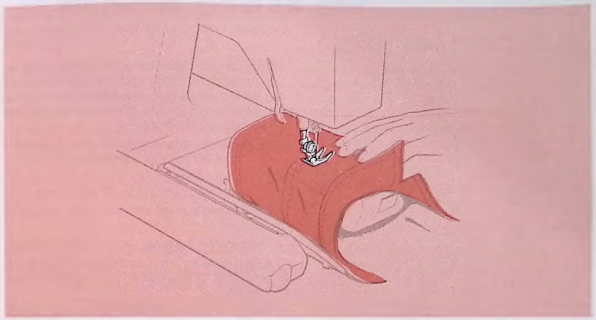
**BUTTONS**



Sewing buttons on a cuff or neckband is no longer a task when the free-arm surface is used. Cuffs slip around the sewing surface without being pulled out of shape, so you can see and handle the stitching area easily.



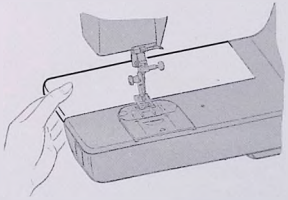
**SLEEVES**



Free-arm sewing takes the difficulty out of topstitching a sleeve. The armhole rotates smoothly under the needle so that you can place stitching accurately. The extra control afforded by the free arm is especially helpful for topstitching flat-fell seams.

Badges, emblems and insignias can be attached to shirts and uniforms by slipping sleeve or hard-to-reach area over the sewing surface.

To raise *Flip & Sew* panel, place hand under panel and lift up until it locks into place. A click will be heard when panel is locked in position.



# 10. Caring for Your Sewing Machine

## *cleaning and lubricating*

How often you will need to clean and lubricate the machine will depend on how often you use it and where you keep it. The following general guidelines assume that you will be sewing several times a week. But if you use your machine more frequently, lubricate it more often than the guidelines suggest.

***CAUTION:** Before cleaning and lubricating your machine, disconnect the power-line plug from your electrical outlet.*

**EVERY FEW WEEKS —**

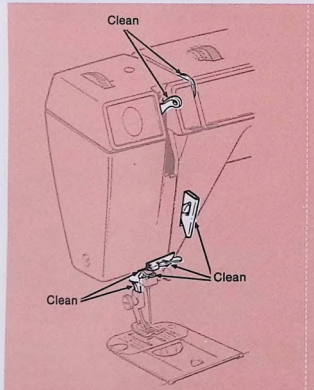
Remove lint or fluff from exposed parts.

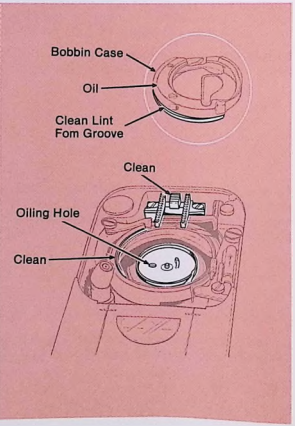
With the lint brush, and a soft cloth, clean:

- Tension discs
- Take-up lever and thread guides
- Presser bar and needle bar
- Bobbin case. Removal of lint from groove on outer edge of bobbin case is important. Lint accumulation could prevent machine from operating properly. (See next page for removal of bobbin case.)
- All machine surfaces (If necessary, dampen the cloth. Do not use detergents.)

Remove needle plate, as instructed on page 6, and clean:

- Feed and hook area
- After cleaning, turn hand wheel towards you until hole in hook area is located as in illustration.
- Apply one drop of SINGER® oil at points indicated.






### REMOVING THE BOBBIN CASE

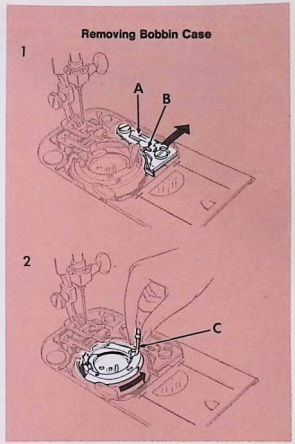
***CAUTION:** Before removing the bobbin case disconnect the power-line plug from the socket outlet.*

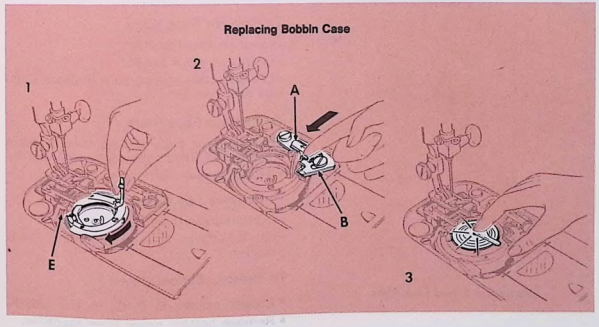
- Raise needle by turning the hand wheel *toward you.* Open slide plate.
- Remove needle plate and bobbin. Keep bobbin push button in sewing position.

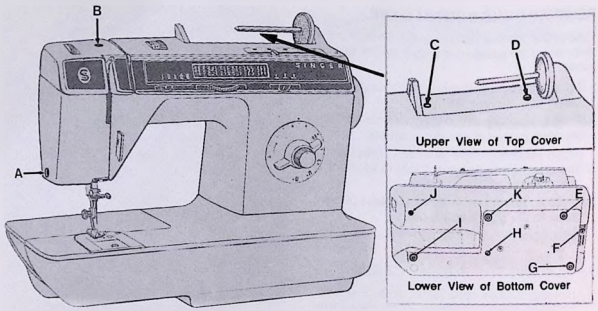
1. Push retaining Slide **A** in the direction of the arrow and slide the position bracket **B** toward the right.
2. Holding bobbin case latch **C**, twist bobbin case to the right and lift out.

### REPLACING THE BOBBIN CASE

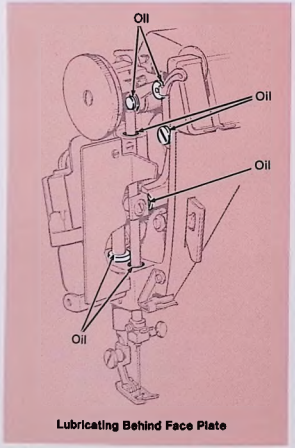
1. Holding bobbin case latch, slide the bobbin case toward the back of machine into hook raceway **E** and twist bobbin case until latch is in the center.
2. Push retaining Slide **A** in the direction of the arrow and slide the position bracket **B** toward the left to lock in place.
3. Replace bobbin and snap latch down. Replace needle plate and close slide plate.






To Remove Face Plate - Top Cover - Bottom Cover




Lubricating Behind Face Plate

## EVERY FEW MONTHS —

***CAUTION:*** *Before lubricating your machine, disconnect the power-line plug from your electrical outlet.*

Lubricate parts behind the face plate, under the arm top cover, and bottom of machine.

- Apply a drop of oil (but no more than a drop) to all places indicated.

### To Remove Face Plate

- Lower presser-foot lifter.
- Loosen screws **A** and **B**.
- Lift face plate making sure it clears pressure dial, then out.

### To Replace Face Plate

- Replace face plate making sure it clears pressure dial. Then tighten screws **A** and **B**.
- Return presser-foot lifter to up position.

### To Remove Top Cover

- Loosen screws **C** and **D**.
- Lift top cover up and remove it from machine.

### To Remove Bottom Cover

- Loosen screws **E, F, G, H, I, J** and **K**.
- Remove bottom cover from machine.



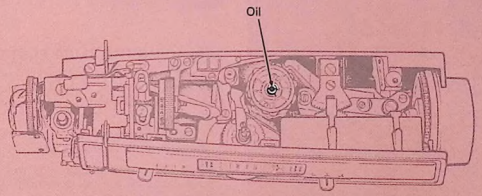
- Apply three drops of oil to all places indicated.
- Occasionally apply one drop of oil to all other rotating or moving machine connections to ensure freedom of movement.

After oiling, replace face plate and arm top cover. Sew a few lines of stitching on a scrap of material to remove excess oil.

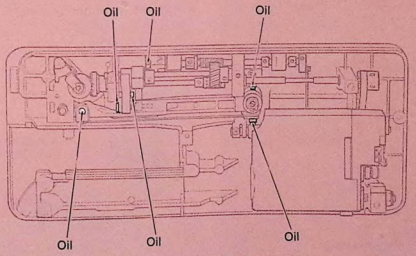
SINGER oil is available for purchase at your Singer store.

## IF MACHINE IS TO BE STORED

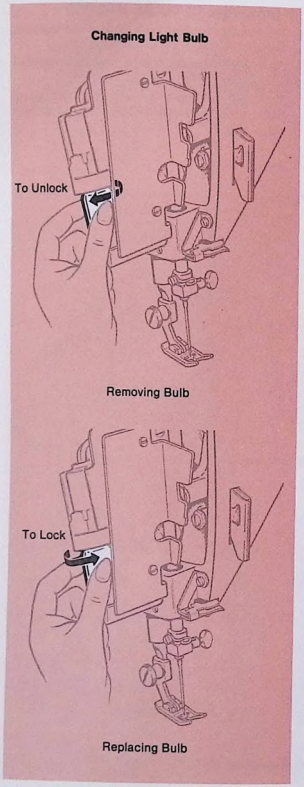
- Disconnect power-line plug from electric outlet.
- Clean all exposed parts and area behind face plate.
- Swab all exposed metal parts and parts behind face plate with SINGER oil to protect against rust.




Lubricating Top of Machine




Lubricating Bottom of Machine




## CHANGING THE LIGHT BULB

***CAUTION:*** *Disconnect the power-line plug from the socket outlet before changing light bulb.*

This machine is designed to use a 20 watt maximum bayonet base bulb **only.**

Remove face plate, as instructed on page 68.

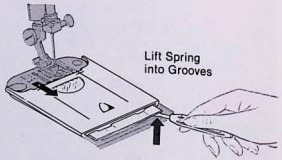
**Removing Bulb:** Press bulb into socket and at the same time turn bulb in direction shown to unlock bulb pin *(do not attempt to unscrew the light bulb).*

**Replacing Bulb:**Press new bulb into socket, with bulb pin entering slot of socket, and turn it in direction shown to lock bulb in position. Replace face plate.

## REPLACING THE SLIDE PLATE

You will not have any occasion to remove the slide plate. However, if it should accidentally become disengaged from the machine, it is easily replaced.

- Raise the presser foot and make sure needle is in its highest position.
- Place slide plate in slide way with the front edge close to, but not covering, the retaining spring (as shown).
- With a small screwdriver, lift each end of the spring into each of the side grooves on the underside of the plate.
- Draw the plate gently toward you and fully engage the spring.
- Close slide plate.




**Replacing Slide Plate**



## INDEX


Accessories ..... 4
Appliqué ..... 60, 61
Blindstitch Hems ..... 50
Bobbin ..... 4
  Raising Bobbin Thread ..... 15
  Removing Bobbin ..... 14
  Removing Thread ..... 14
  Replacing an Empty Bobbin ..... 14
  Replacing a Wound Bobbin ..... 15
Bobbin Case ..... 67
  Removal ..... 67
  Replacement ..... 67
Chainstitching ..... 34
Choosing Needle and Thread ..... 9
Cleaning and Lubricating ..... 66
Darning ..... 63
Darts ..... 49
Floral Designs ..... 33
Free-Arm Sewing ..... 64
Free-Motion Stitching ..... 31
Guiding and Supporting Fabric ..... 23, 40
Hints for Home Service ..... 71
  Changing Light Bulb ..... 70
  Replacing Slide Plate ..... 70
Hints on Sewing Special Fabrics ..... 44
How to Start Sewing ..... 13
Mending ..... 62
Monograms ..... 59
Motifs ..... 59
Needle ..... 4
  Position ..... 17
  Replacement ..... 4
  Threading ..... 10, 11
Needle plates ..... 6
  Changing Needle plates ..... 6
  With Electric Motor ..... 8
Pin Basting ..... 21
Presser Feet ..... 5
  Changing Presser Feet ..... 5
Pressure Adjustment ..... 19
Principal Parts ..... 2, 3
Reverse Stitching ..... 19, 22, 23
Satin Stitching ..... 28
Seams ..... 21, 22, 23
  Corded ..... 48
  Inside ..... 47
  Lingerie ..... 41
  Overedged ..... 42
  Straight ..... 22
  Stretch ..... 41
Setting Selectors ..... 16
  Needle Position ..... 17
  Pattern Group ..... 20, 25
  Pressure ..... 19
  Stitch Length ..... 19
  Stitch Pattern ..... 20
  Stitch Width ..... 16
  Thread Tension ..... 18, 27, 28
Sewing Knit and Stretch Fabrics ..... 39
Threading the Machine ..... 10, 11
Top Stitching ..... 60
Twin-Needle Stitching ..... 29
  Decorative Stitching ..... 30
  Inserting the Needle ..... 29
  Machine Settings ..... 30
  Threading the Needle ..... 29
Zig-Zag Stitching ..... 24
  Selecting a Pattern Group ..... 25
  Selecting a Stitch Pattern ..... 25
  Stitch Patterns ..... 24
Zippers ..... 46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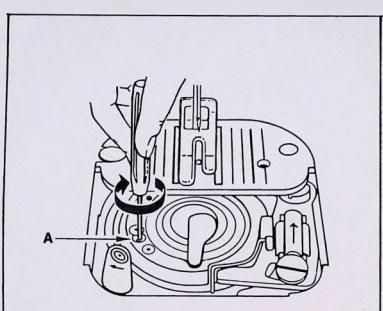


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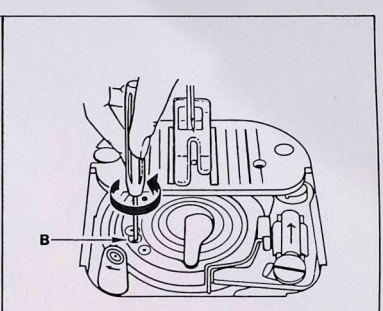


2

## Lower Thread Tension

Your machine has been provided with an adjustable lower thread tension system. Please follow these instructions for either straight or pattern sewing.

1. The lower thread tension has been set at the factory for most types of stitching. For heavy and very heavy fabrics we recommend to increase tension by turning screw **A** clockwise as far as possible, using the small screwdriver from accessories.

   When stitching is completed return screw **A** to its position for regular sewing.

2. For all zig-zag stitching make sure the screw **B** is turned to the left (anti-clockwise) as far as it will go, using the small screwdriver in your accessory box.

## Tensione del Filo della Bobina

La Sua macchina è fornita con un impianto per poter regolare la tensione del filo dell'ago. Seguire questi istruzioni per l'impunitura diritta o per cucire disegni.

1. La tensione del filo della bobina è già regolata in fabbrica per i lavori di cucito. Comunque, per tessuti fini si raccomanda di diminuire la tensione girando la vite **A** in senso antiorario, usando il piccolo cacciavite compreso tra gli accessori.

   A fine cucito riportare la vite **A** alla posizione iniziale per il cucito regolare.

2. Per tutte le cuciture a zig-zag girare la vite **B** a fondo verso sinistra (in senso antiorario) usando il piccolo cacciavite a corredo.

## Tensión del Hilo Inferior

Su máquina incorpora un mecanismo para ajustar la tensión del hilo inferior. Sírvase seguir estas instrucciones para la costura de punto recto o para la costura de modelos o diseños.

1. La tensión del hilo inferior ha sido ajustada en la fabrica para la mayoria de costuras. Para materiales pesados y muy pesados, le recomendamos que aumente la tensión girando el tornillo **A** en el sentido de las agujas de un reloj tanto que posible, usando el pequeño destornillador de sus accesorios.

   Al terminar de coser, gire el tornillo **A** de nuevo a su posición normal de costura.

2. Para toda costura en zig-zag, asegurese de que el tornillo **B** está girado totalmente hacia la izquierda (en el sentido contrario a las agujas de un reloj), usando el destornillador pequeño que viene en su caja de accesorios.

# QUALITY ASSURANCE CHECKLIST

| FOR SINGER MACHINE # 290 | Quality Performance |
|---|---|
| Machine Threading | ✓ |
| Bobbin Winding | ✓ |
| Sample Stitch Patterns | |
| 1. Straight Stitch | ✓ |
| 2. Zig Zag Stitch | ✓ |
| 3. Stretch Stitch | ✓ |
| 4. Buttonhole | ✓ |
| Stitch Length | ✓ |
| Stitch Width | ✓ |
| Stitch Balance | ✓ |
| Reverse | ✓ |
| Tension Set At | 4 |
| 2-Speed Motor (2010, 2005, 1425N, 290 only) | ✓ |
| Foot Control | ✓ |
| Accessory Kit Complete | ✓ |

CHECKED BY VMG

SERIAL NUMBER OF SEWING MACHINE C2222703

| Furnished to Customer: | Included |
|---|---|
| 1. Instruction Manual | ✓ |
| 2. Sales slip | |
| 3. Warranty card | ✓ |
| 4. Certificate for machine lessons | |

# NEW SEWING MACHINE WARRANTIES
# (1400 SERIES/290 SERIES)

LIMITED 20 YEAR WARRANTY
SEWING MACHINE HEAD

If any manufacturing defect appears in the sewing machine head or any of its parts other than those listed below within 20 years of purchase, we will repair it free of charge.

LIMITED 2 YEAR WARRANTY
MOTORS, LIGHT ASSEMBLY, WIRING, SWITCHES
AND SPEED CONTROLS

If any manufacturing defect appears in these parts within 2 years of purchase, we will repair it free of charge.

LIMITED 90 DAY WARRANTY
ADJUSTMENTS, BELTS, RINGS, BULBS AND ATTACHMENTS

Within 90 days of purchase we will provide, free of charge, required adjustments. During the same period we will also replace, free of charge, defective belts, light bulbs, or attachments, if any

GENERAL

THESE WARRANTIES MAY ONLY BE USED BY THE ORIGINAL CONSUMER OWNER OF THE SEWING MACHINE; THEY ARE NOT TRANSFERABLE TO ANY SUBSEQUENT OWNERS. SERVICE UNDER THESE WARRANTIES MAY ONLY BE OBTAINED WITHIN THE 48 CONTIGUOUS STATES, ALASKA AND HAWAII.

Service under the above warranties may be obtained by returning the sewing machine with this warranty document and proof of purchase to your nearest Singer Company store, Authorized Service Center or Singer Approved Dealer. Please consult your phone book for the location nearest you. If you have any questions regarding these warranties, you may write to.

SINGER WARRANTY
DEPARTMENT 1776
321 FIRST STREET
ELIZABETH, NEW JERSEY 07207

This sewing machine is warranted only in normal household (non-commercial) use. These warranties do not cover failures caused by abuse, lack of maintenance in accordance with SINGER care and cleaning instructions, misuse, or events beyond our control. These warranties give you specific legal rights, and you may also have other rights which vary from state to state.

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THE SINGER COMPANY DISCLAIMS LIABILITY UNDER THIS WARRANTY FOR ANY DAMAGE OR DEFECT RESULTING FROM THE USE OF OTHER THAN SINGER PARTS AND APPROVED SERVICE IN THE REPAIR OF YOUR MACHINE.

To keep your machine operating properly, we recommend that you take instructions on use provided for new machine owners, follow the operating instructions and periodically have your machine serviced and tuned by a sewing machine specialist knowledgable about Singer* Sewing Machines.

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